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ABSTRACT

This two-part publication reports on a study of consumer information delivery by library and non-library networks, which involved an extensive literature review, a telephone survey of 620 library networks, the development of an assessment model for the effectiveness of network information delivery, the development of an in-depth guide for interviewing networks, and case analyses of five library and four non-library networks providing consumer information services. The first part contains: (1) a discussion and bibliography of the literature on library and non-library consumer information networks; (2) a draft assessment model containing research questions in 13 areas; (3) descriptions of the library network survey and the selection of nine networks for in-depth interviewing; (4) the similarities and dissimilarities among the nine networks interviewed; (5) a reexamination of the assessment model in light of interview findings; and (6) study conclusions. The interview guide and network survey questionnaire are appended. The nine case studies presented in the second part analyze the consumer information services provided by Masssachusetts' Community Health Information Network (CHIN), Free Library of Philadelphia, Nassau Library System, OCLC's Channel 2000, Denver's Regional Energy/Environment Information Center, Better Business Bureau of Western Massachusetts, Consumer Education Resource Network (CERN), Massachusetts Executive Office of Consumer Affairs, and Middlesex County Extension Service. (ESR)

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Final Report

Project No. 039MH1001
Contract No. 300-81-0018
RFP No. 80-76

CRITERIA OF EFFECTIVENESS FOR NETWORK DELIVERY OF CITIZENS INFORMATION THROUGH LIBRARIES

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September 1982

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ABSTRACT

This contracted study for the Office of Libraries and Learning Technology, Office of Educational Research and Improvement, U. S. Department of Education, examined the current state of the art in library network delivery of consumer information services and developed an assessment model for the effectiveness of network delivery of citizens' information, with an emphasis on the role of libraries. The first phase of this study, which involved a comprehensive survey of 620 library networks, developed typologies for both library and non-library networks providing consumer information services.

With the assistance of an Advisory Group consisting of experts in both library and non-library network activities, a conceptual model, including thirteen areas of consideration in developing criteria of effectiveness of information networks in providing consumer information services, was developed. For each of the thirteen areas, research questions were formulated. An Interview Guide was developed for testing and refining the conceptual model.

Based on the network typology developed by the research team, nine networks (five library and four non-library networks) providing consumer information services were selected for in-depth case analyses. Case analyses, which were derived from the Interview Guide, reflected the history, present status, as well as the short-term and long-term concerns of network staff on the provision of consumer information services. Even with the limitation of nine case analyses, major similarities and dissimilarities among the networks were evident. The findings of these case analyses enabled the researchers to re-examine the research questions. This final report, as well, contains the findings of the individual interviews upon which the assessment model was examined and finally modified.

ACKNOWLEDGEMENTS

This contracted project from the Office of Libraries and Learning Technology, U.S. Department of Education (Contract No. 300-81-0018), involves the ideas, encouragement, advice, and consciencious effort of many people. Unfortunately, not all of them can be acknowledged individually. We want to single out the following for special recognition. Throughout the whole project, we worked closely with an active Advisory Group consisting of five experts representing different aspects of networking and project concerns: Dr. Neal Kaske, Director of Research and Development for OCLC, Inc.; Mrs. Barbara Markuson, Executive Director of the Indiana Cooperative Library Services Authority; Joseph McDonough, Esq., Deputy Director of the City of Boston Consumer Council; Mr. Vernon E. Palmour, Consultant from Reston, Virginia; and Mr. Ward Shaw, Executive Director of the Colorado Alliance of Research Libraries. We benefitted greatly from their advice, suggestions, and discussion.

During the early phases of this study, specifically the literature search and telephone survey of the 620 library networks, numerous research assistants participated with enthusiasm and devotion. In particular, we want to acknowledge the assistance of Fred Friedman, Melissa Velhage, and Debby Carr. The final report was prepared through the use of word processing of a microcomputer system by Anne and Cathy Chen. Their able assistance has been very much appreciated.

This project would not have been possible without the enthusiastic cooperation from the administrators and staff of the nine library and non-library networks selected for in-depth case analyses. Specifically we want to acknowledge Ms. Ellen Gartenfeld, Director of the Community Health Information Network (CHIN), Cambridge, MA; Ms. Sigrid R. Reddy, Director of the Watertown Public Library, Watertown, MA (member library of CHIN) and her staff; Mr. George Holloway, Head of Community Services, the Free Library of Philadelphia; Ms. Dorothy Puryear, Adult Interagency Specialist of the Nassau Library System, Long Island, NY, and Mr. Frank Santagata, Director of the Information and Referral Service, Nassau County Health and Welfare Council; Mr. Mark Bendig, Research Associate of the OCLC Research Department, Columbus, OH, and Mr. Richard Sweeney, Director of the Public Library of Columbus and Franklin County, OH; Ms. Linda Cumming, Head of the Conservation Library, Denver Public Library, Denver, CO, and Mr. Robert Brown, Director of the Colorado State Energy Extension Service, Denver, CO; Mr. William C. Webb, Director of the Better Business Bureau of Western Massachusetts, Springfield, MA; Ms. Nancy Nolf, the former Associate Director of the Consumer Education Resource Network (CERN), Rosslyn, VA and her staff: Ms. Barbara Neuman, staff member of the Massachusetts Executive Office of Consumer Affairs, Boston, MA; and the staff members of the Middlesex County Extension Service, Concord, MA.

Dean Robert D. Stueart of the Graduate School of Library and Information Science, Simmons College, generously contributed his time to this project. He offered support and encouragement, worked closely with us and the Advisory Group, and critically read the final version of this report.

Finally, but not the least, we benefitted from the constant advice and suggestion of three staff members of the Office of Libraries and Learning Technology, U.S. Department of Education: Mr. Henry Drennan, Dr. Sarah Bishop, and Ms. Yvonne Carter. They served as project officer from the Department successively.

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PART I.

PROJECT REPORT

CHAPTER 1

INTRODUCTION

Library networks, both formal and informal, have received extensive coverage in the literature of library and information science; however, writings dealing with the effectiveness of these networks have addressed the issue only from an operational standpoint (such as cost effectiveness and document delivery capabilities) focusing on computerization and telecommunications. Consequently, it is not surprising that the everyday needs of consumers have received little attention in the literature on networking. However, the public frequently needs consumer information and would benefit from the advantages of networking. (1)

In our recently completed study of the information seeking patterns of New England residents, we discovered that the largest percentage of non-work situations (22.2%), described by the 2,400 respondents, related to consumer issues. In order to make a decision, solve a problem or understand a situation, respondents relied heavily on interpersonal information providers (e.g., friends and colleagues) and only infrequently consulted libraries. Furthermore, they expressed satisfaction with the providers used, even those labelled as "least helpful." (1) With the demand for accountability from public institutions, the demand for a greater return in service for each tax dollar spent, as well as consumers' tendency to shun libraries while seeking information, it is imperative that a more complete understanding of the role libraries play in providing consumer information (to be defined in the next section) be achieved. This understanding might be gained from studies of the use of library collections and reference source publishing, libraries' interlibrary loan capabilities, referral processes, or (as this investigation will treat) the role of library networking.

Networks which deal with consumer information issues may consist solely of libraries, may exist completely outside the library structure, or may involve libraries with non-library organizations. This report, and the contracted research project, deals with all three types of networks.

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[1] Ching-chih Chen and Peter Hernon, A Regional Investigation of Citizens Information Needs in New England: Executive Summary Report (Project No. 475 AH90031). U.S. Department of Education, Office of Libraries and Learning Technology, 1981. See also: Ching-chih Chen and Peter Hernon, Information Seeking: Assessing and Anticipating User Needs. New York: Neal-Schuman Publishers, 1982.

DEFINITIONS

Before proceeding, it is beneficial to define the three major terms: networks, consumer information, and consumer education.

Networks consist of two or more independent libraries or other information providing organizations joining together in a common pattern of information sharing. Since there must be both a regular sharing and a contractual arrangement, networking is a coordinated effort to solve a common problem.

Consumer information is that personal, financial and other information needed by the general public to resolve problems within the family or household. Non-work situations are emphasized since the person is not paid to get the information. It is the information which people seek to assist them with everyday problems, including those relating to money matters, health, housing, or energy.

Consumer education can be defined by describing activities which it encompasses:

- informing people about consumer issues so that they can improve their own situation and make more effective use of the network
- motivating people to reform current practices
- helping people learn skills necessary for self-improvement
- enhancing the teaching and communication skills of those engaged in educating consumers
- increasing knowledge "through research and evaluation concerning the most effective ways of achieving these objectives. (2)

In short, consumer education is a process that provides professional training and research, that enables people to improve themselves, and that facilitates environmental reforms in order to achieve this goal. (3)

REQUEST FOR PROPOSAL (RFP) NO. 80-76

This study was contracted to us as a direct result of our response to the RFP No. 80-76. It was directed to investigate four objectives related to network provision of consumer information:

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[2] Adopted from definition of consumer health education given in Promoting Health Consumer Education and National Policy, edited by Anne R. Somers. Germantown, MD: Aspen Systems, Corp., 1976. p. xv.

[3] Ibid.

- develop "an evaluation methodology which can be utilized in determining the optimum design and performance of library information networks that provide citizens' consumer information"
- "furnish information that will enable State and local governments to design and conduct library information networks serving consumers with a maximum benefit/cost ratio"
- "respond to the resolutions on library information networking recommended by the White House Conference on Library and Information Services (November 1979)"
- "increase an awareness in the library and information science community of the correlation between quality standards for library information networks and the maximization of benefits to cost."

In this regard, the researchers developed an assessment model (see Chapter 2) and investigated nine library and non-library networks, as stipulated in the RFP, in order to view these variables in proper context. Chapters 4 and 5 compare findings among the nine networks and identify the range of criteria affecting network performance. They also identify points of similarity among the networks in an effort to aid library networks wanting to expand their role as providers of consumer information.

ADVISORY GROUP

An Advisory Group, consisting of members who are actively involved in different aspects of networking, was formed to aid in accurate definition of terms, to provide a more complete state of the art assessment than could be gathered from the published literature, to supply critical feedback on the research design, and to anticipate potential problem areas. Such a group fills an indispensable role for exploratory research on a subject whose full dimensions cannot be completely understood from the reported literature.

The Advisory Group consists of five experts: Dr. Neal Kaske, Director of Research and Development for OCLC, Inc.; Mrs. Barbara Markuson, Executive Director of the Indiana Cooperative Library Services Authority; Joseph McDonough, Esq., Deputy Director of the City of Boston Consumer Council; Mr. Vernon E. Palmour, Consultant from Reston, Virginia; and Mr. Ward Shaw, Executive Director of the Colorado Alliance of Research Libraries. These national leaders bring to the project broadly-based knowledge of networking, consumer information services both within and outside the library field, research design, and evaluation techniques.

The first meeting of the Advisory Group, together with the U.S. Department of Education project officer and Simmons research team, was held at Simmons College on February 23 and 24, 1981, to discuss the research design and other aspects specified in RFP No. 80-76. Extensive attention was paid to the definition of consumer information and to the role of networks in the provision of such information. The consensus of both the Advisory Group and the research team was that the topic was nebulous, lacking at this time a sufficient research base in the existing literature for the formulation of an appropriate, general conceptual model. As was previously mentioned, individual networks are experiencing problems in devising models and evaluative mechanisms for their own purposes; therefore, a meaningful general model is difficult to devise and test. The Advisory Group recommended that, prior to addressing the specifics of the contract, there be a determination of the number and types of networks, specifically library related, providing consumer information. In order to make the survey manageable, it should exclude information and referral services provided by public libraries (4) and agencies of the Federal Government. (5) Support for the validity of the Group's recommendation is evident from the following discussion of the existing literature and the accompanying report on the completed survey. Chapter 3 reports on the results of the survey of library related networks and the typology developed for non-library networks.

LITERATURE SEARCHES

MANUAL SEARCH

The sources contained in Table 1.1 as well as directories such as those issued by the Association of Specialized and Cooperative Library Agencies, were initially surveyed for relevant information and references. At this time, we were in search not only of "consumer information" but also for all network and consortia oriented subject headings. The initial search also took us through the Simmons College card catalog. Once individual titles were identified, their bibliographies were scrutinized. Great pains were taken to eliminate materials that were technical (manuals and reports on well-known information networks such as OCLC, Inc.) or out-of-date materials. The names of authors in the field were compiled so that all their published works could be identified.

Once the search was narrowed to include only consumer information networks (see Table 1.2 for some of the subject terms checked), the literature of consumer affairs was also examined. Back and current issues of such serials as the *Journal of Consumer Research* were scrutinized, along with *directories dealing with* consumer use and prepared by various government departments as well as private agencies. Here the problem was

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[4] Thomas Childers, *Public Library Information and Referral Project: Phase I, Survey.* (Project No. 475AH70120) U.S. Department of Health, Education, and Welfare, Office of Education, Office of Libraries and Learning Resources, 1979.

[5] *Information and Referral for People Needing Human Services - A Complex System that Should be Improved.* Report to the Congress by the Comptroller General of the United States, March 1978.

Table 1.1. Bibliographic Sources Initially Searched

- *The ALA Yearbook* (Chicago: ALA)
- *Books in Print* (New York: Bowker)
- *The Bowker Annual of Library and Book Trade Information* (New York: Bowker)
- *Business Periodicals Index* (New York: Wilson)
- *Cumulative Book Index* (New York: Wilson)
- *Encyclopedia of Library and Information Science* (New York: Dekker)
- *Forthcoming Books* (New York: Bowker)
- *Index to Legal Periodicals* (New York: Wilson)
- *Library Literature* (New York: Wilson)
- *Public Affairs Information Service. Bulletin.* (New York: PAIS)
- *Publishers' Weekly* (New York: Bowker)
- *Readers' Guide to Periodical Literature* (New York: Wilson)
- *Social Science Index* (New York: Wilson)

Table 1.2. Sample Subject Headings Searched

- Citizen Information
- College Libraries
- Community Control
- Community Information
- Community Research
- Consumer Education
- Consumer Information
- Consumer Studies
- Consumers
- Information Network
- Intellectual Cooperation
- Library Cooperation
- Library Information Networks
- Network
- Public Libraries
- Social Service Agencies
- Social Surveys
- Use Studies - Networks
- Use Studies - Public Library

identifying networks, specifically. It was relatively easy to obtain names of individual agencies, but difficult to ascertain whether these were involved in networking arrangements; it is significant to note, too, that lists of organizations which might not appear in official publications were not exhaustively checked.

ONLINE DATA BASE SEARCHING

As depicted in Table 1.3, numerous indexes and abstracts were searched online with the technological facilities at Simmons College. Since search terms could be combined, the researchers examined these printed sources exhaustively. Given the time lag for the entry of new citations into some data bases, the printed issues for 1981 were also searched. Of all the data bases searched, the ERIC files and Magazine Index yielded the most useful references. Despite this fact, the majority of their citations were not directly relevant to the study objectives.

Table 1.3. Data Bases Searched On-line

- Comprehensive Dissertation Abstracts
- ERIC (Education Resources Information Service)
- Magazine Index
- Monthly Catalog of United States Government Publications
- National Newspaper Index
- PAIS (Public Affairs Information Service) International
- NTIS (National Technical Information Service)
- Sociological Abstracts

THE LITERATURE ON LIBRARY AND NON-LIBRARY CONSUMER INFORMATION NETWORKS

OVERVIEW

A point of confusion in the literature (and one that persisted throughout the study) relates to the definition of consumer information. To some, it might refer to any information needed for everyday problem-solving, while for others it relates to information needed to help solve problems of consumer issues in the market place. For example, a need for information on the purchase of services or products would be a consumer information problem. The definition used in this study has already been given; however, it should be recognized that there is not a general consensus about a definition.

Existing literature of potential interest to our research, obtained through our searches, focusses on numerous areas:

- programs in operation
- characteristics of a "good" consumer information system
- the information needs and seeking patterns of consumers
- why people need access to high quality consumer information
- profiles of information seekers
- recent developments in the field (e.g., those associated with health care programs)
- consumer protection legislation
- the resolution of consumer complaints
- publication of appropriate aids (e.g., buying guides)
- rating services
- product quality
- the value of consumer education
- the role of libraries in informaion provision
- the role of information centers (e.g., those operated by local, State, and Federal government)

Writings described such services as information and job-lines, community information and referral services, document delivery services and special education programs. In spite of the diversity of topics represented, the reported literature must still be characterized as sparse. Furthermore, the bulk of these writings were only indirectly related to the library and its role as information provider. For the complete literature sources, see the Bibliography at the end of this Chapter.

Conceivably, additional information on the provision of consumer information services might be found in library and non-library newsletters, pamphlets, annual reports, news releases, and mimeographed reports. To get at some of this "unpublished" literature, researchers would have to contact the multitude of libraries and non-library organizations individually. Such an extensive nationwide undertaking, well beyond the scope and purpose of this investigation, may not even be necessary given the active involvement of such important information networks as the Consumer Education Resource Network (CERN) located in Rosslyn, Virginia, (6) and the National Health Information Clearinghouse (NHIC) also located in Rosslyn, Virginia. CERN serves as a clearinghouse for consumer information and education, distributing annotated bibliographies, providing access to data

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[6] CERN is located at 1555 Wilson Boulevard, Suite 600, Rosslyn, VA 22209. The telephone number is (703) 522-4616; the toll free information exchange is (800) 336-0223.

bases related to consumer information, and disseminating both a newsletter and an informational packet. NHIC is a project of the Office of Health Information, Health Promotion and Physical Fitness and Sports Medicine in the Department of Health and Human Services. Established in 1979, it seeks to improve public access to health information. In addition to maintaining an inquiry and referral service, the clearinghouse also produces reference aids on various subjects in the health field. (7)

DISCUSSION OF SPECIFIC WRITINGS

Information should "aid and foster a self-reliant, self-actualizing consumer who can make the most of decisions and play an equal role with sellers in the market place." (8) Higher quality information, therefore, is "the key to such consumer emancipation." (9)

Community information centers, such as those discussed by Clive Hopkins, enable residents of a community to receive answers to questions about health, welfare, education, etc., from the local government. The staff of the center provide information and referral service, participate in problem solving, and collect information about community attitudes toward local government and its services. In the long run, the effectiveness of the centers would be increased through the employment of telecommunications and information management technology. (10)

Libraries must cooperate with agencies "through local coordinating committees, shared premises, joint publicity, referral and the sharing of professional expertise." (11) Some consumer information agencies would benefit from professional advice on the organization of their collections of data and publications,

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[7] Joanne G. Angle, "Consumer access to health information at the national level," paper presented at the Medical Library Association, Montreal, Canada, June 1981. The theme of the session was "Consumer Health Information."

[8] Hans B. Thorelli and Jack L. Engledow, "Information seekers and information systems: a policy perspective," Journal of Marketing 44: 9 (Spring 1980).

[9] Ibid.

[10] Clive Hopkins, Community Information and Service Centers: Concepts for Activation. Washington, D.C.: U.S. Department of Commerce, 1976.

[11] Jennifer Rowley, David Butcher, and Christopher Turner, "Consumer information and advice: the role of public libraries," ASLIB Proceedings 32: 417 (November/December 1980).

> "particularly on systematic subject indexing. Professional librarians can also assist in the training of advice workers, both in the development of their information-handling skills and in creating awareness of the resources that libraries and other external information sources can offer. Libraries can help to publicize the existence of the information and advice agencies and make members of the public aware of the kinds of service offered through joint publicity." (12)

Information can be provided in a variety of ways: for example, in printed form for users to interpret, or in already interpreted form. If the latter is done, the organization (or the network) may take on an advocacy role, one that many libraries may be unwilling to undertake. This is one important difference between libraries and non-library organizations such as local commissions and councils. (13) A pertinent question asks to what extent libraries should "become directly involved in advice work in the consumer field and in other areas?" (14) Libraries can provide consumer advice by

- maintaining an active advice service in cooperation with other agencies
- integrating consumer advice into a library-operated general community information and advice program
- offering a specialist advice service for consumer problems only
- reorienting the basic functions of library services to give information and advice as appropriate in the normal course of work. (15)

At some point, more libraries might want "to participate in negotiations or advocacy as well as in advice work." (16) As Joseph C. Donohue suggests, where information of a factual nature is needed and where it could be obtained from published sources, libraries could direct users to the appropriate source. "If what was needed was substantive help," libraries could refer patrons "to the social agency, organization, government department or

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[12] *Ibid.*, p. 423.

[13] For example, Massachusetts consumer councils and commissions are listed in Consumers' Council, Commonwealth of Massachusetts, *You Can Get Results: A Manual for Resolving Consumer Complaints*, (Commonwealth of Massachusetts, 1975).

[14] Rowley, *Op. cit.*, p. 424.

[15] *Ibid.*

[16] *Ibid.*

individual able to provide that help." (17) By acting as a broker between people with information needs and the resources necessary to fill these needs, libraries and their networking capability can perform a vital function. Lois Byrum, however, cautions that networks could not provide such a service for rehabilitation, a topic on which many libraries do not at present have good collections. It is possible that networks in combination with a clearinghouse in the field could improve access to documents. (18)

Trudy A. Gardner and Judy A. Siebert, writing in *RQ*, find that more public, academic, hospital and medical libraries now want to meet the health related information needs of their clientele. Characteristic of the trend is the establishment of the Center for Medical Consumers and Health Care Information in 1976. (19) This New York based Center attempts "to develop various ways of getting health and medical information to the public in an easily understood objective format." In addition to the creation of a library devoted entirely to health information for the general public, they find that "more and more suggestions are appearing in the literature for the development of a collection of materials for the health-conscious public." One innovation, they note, is TEL-MED, created by the San Bernadino (California) Medical Society and consisting of a collection of audiotapes on frequently requested subjects. Libraries such as the Public Library of Columbus and Franklin County, Ohio, use the system as well.

Believing "that for many consumer information needs, *Readers' Guide* or *Magazine Index* will point to relevant sources that are generally available in most public libraries," they conducted a two-month pilot project at one public library. They monitored health or illness-related questions in an effort to determine if references could be located in one or both sources that would answer the question. The major finding was that they could locate pertinent references; public libraries therefore may not need to augment their own resources by engaging in referral

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[17] Joseph C. Donohue, "Some experiments fail: the public information center project at the Enoch Pratt Free Library," in *Social Responsibilities and Libraries* by Patricia Glass Schuman. New York: Bowker, 1976. pp. 161-163.

[18] Lois Byrum, "A state agency librarian's views on rehabilitation information problems," in *Proceedings of the Rehabilitation Information Network Conference*, June 1978. Washington, D.C.: The Catholic University of America, 1979. pp. 20-25.

[19] Trudy A. Gardner and Judy A. Siebert, "Consumer Health Information Needs and Access through Existing Indexes," *RQ*, 20 : 366-372 (Summer 1981).

and networking. (20)

Our literature search reveals some interesting discussions of library networks in the provision of consumer information. A survey of how over 300 public library users in Illinois sought health information indicates that more than 75 percent of them wanted additional information readily available on the subject. (21) It might be noted that the Federal Government has many resources aimed specifically at providing consumer information; the Department of Health and Human Services alone has 76 such resources. (22) "Since the mid-1970s, the emphasis on specific disease categories has led to a proliferation of Federal resources to respond to the consumer demands for information. Prominent under these are the Office on Smoking and Health, the Office of Cancer Communication, and the National Clearinghouse for Alcoholic Information." (23) Since government agencies encourage disease prevention and the promotion of health, consumers often approach them for health information dealing with nutrition, stress, and how to stay healthy. (24)

Health information networks might be predicated on the assumption that libraries, as public information centers, need to be active co-partners with health care team members, health agencies, and consumers. (25) Consumer health education would be a logical extension of the current services offered by public libraries. In fact,

> "The best and most viable service that a health sciences library and a public library may perform is working together toward a common goal, that is the provision of accurate, current health information. However, the path for each library will vary according to its own institutional policies and its clientele." (26)

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[20] Ibid.

[21] Michele A. Johns, "Consumer health information project: cooperation between the heart of Illinois Library Consortium and the Illinois Valley Library System," a presentation at the Medical Library Association, Montreal, Canada, June 1981.

[22] Angle, Op. cit.

[23] Ibid.

[24] Ibid.

[25] Eleanor Y. Goodchild, Judith A. Furman, Betty L. Addison, and Harold N. Umbarqer, "The CHIPS project: a health information network to serve the consumer," Bulletin of the Medical Library Association 66: 433 (October 1978).

[26] Ibid.

It is important to note that many health agencies "had not thought of libraries as sources for CHE [consumer health education] materials and they welcome the opportunity to disseminate their materials via the libraries." (27)

The Community Health Information Network (CHIN) represents a cooperative effort between the Health Sciences Library of Mount Auburn Hospital and the public libraries of six Massachusetts towns. Begun in 1974, the goals of this service are

- to make health information literature easily accessible to health providers and consumers in communities where they live and work
- to provide current information on available health resources in the community
- to produce programs on health topics in the public libraries and other community settings
- to train public librarians to assist their libraries' users in finding information in the health science literature. (28)

Further, the "...working policy is that librarians must communicate that they are librarians and not health care providers and that they are giving (1) information from published materials and/or (2) referral to recognized service agencies and organizations." (29) In this regard, CHIN provides telephone reference service, on-demand bibliographies and referrals from the public libraries, which are also aided in the development of health information collections. Networks such as CHIN serve a useful purpose:

> "We quickly become aware that most health care facilities and providers never think of sending their clients to the public library for information. CHIN's first step in attempting to change this attitude was to send a copy of our network brochure to more than 5,000 health providers in our six communities. In addition to this, we will be presenting programs on health in most of the member libraries. Such programs have been developed by the

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[27] *Ibid.*

[28] *Community Health Information Network (CHIN): Fact Sheet.* *Cambridge, MA: Mount Auburn Hospital, Community Health Education*, p.1. The Consumer Health Information Project (located in Cambridge, MA) provides a list of recommended reference books for purchase by public libraries, a bibliography of additional informational sources, a resource file of local voluntary health organizations, and workshops to aid public libraries in collection development and in improving their reference services. Johns, *Op. cit.*

[29] *Ibid.*, p. 2.

> network staff with the assistance of the libraries and various community agencies." (30)

Network librarians received in-service training from professional health science librarians.

Consumer Health Information Program and Services (CHIPS), a bilingual consumer health information and referral service, is a cooperative program between the Los Angeles County Carson Regional Library and the Los Angeles County Harbor General Hospital Regional Medical Library. CHIP's goals and objectives may be summarized as follows:

> "The project's goal is to assist in the national effort of health improvement of the American people by providing health information services to the general public within the respective geographical boundaries of both libraries. The project's proposal recognized both the uniqueness of each library jurisdiction and the distinctive yet similar needs of each user group. Foremost among the project's endeavors is the coordination and sharing of activities and findings to achieve the CHIPS goal of a health information network."
>
> "Five objectives were developed to achieve the CHIPS goal. For the first objective, the project was to determine and meet the consumer health information needs of target area residents at a higher percentage than preproject levels of service....The second objective of the project was to identify and establish contact with forty health-related agencies and organizations and to develop a mechanism for for the exchange of informational resources....The third objective is to provide staff development in the area of health information services and materials....The fourth objective is to give the public greater accessibility to health information materials....The project's fifth objective is to share findings and specially produced materials with other libraries, library systems, health professionals, national and local health organizations and the general public (public library clients and hospital patients)." (31)

In 1972, librarians in Santa Clara County, California, agreed upon a Cooperative Information Network (CIN), whereby the information needs of citizens, government and businesses could be

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[30] Ibid., p. 3.

[31] Goodchild, et. al., Op. cit. For another discussion of Projects CHIPS and CHIN see Ellen Gartenfeld and Eleanor Goodchild, "Consumer health information: a view from two coasts," a paper presented at the Medical Library Association, Montreal, Canada, June 1981.

addressed. Resource sharing is essential in times of financial stress if libraries are to offer consumers immediate access to a wide range of library resources. As was noted by Ronnie Markoe, there are two major problems: (1) promoting awareness of libraries and the networks, and (2) methods for evaluating network effectiveness. (32)

In December 1980, the Resource Information Network for Cancer (RINC) was begun in Torrance, California to provide the general public and cancer patients and their families with "centralized access to current informational materials and education programs related to cancer prevention and patient education." (33) RINC is linked to other agencies, centers, hospitals, and clearinghouses (for example, it cooperates with Project CHIPS).

The paper on RINC makes two observations central to the discussion of library networks and the provision of consumer information. First, it asks "what role or roles do libraries have in disease prevention and health promotion? The authors believe that the role has yet to be defined. Secondly, if libraries are to meet the information needs of their users, how successful are they in regard to consumer health information? As the authors note, libraries are in a period of financial insecurity and suggesting that they should adopt new services "may frighten off many people. However, if each partner can assume part of the role, the costs are less, we feel, and all can learn from each other." (34)

As is evident, libraries providing consumer health information realize that they cannot go it alone, they must cooperate with other libraries, agencies, associations, and groups so that their own clientele (health professionals, patients, and the general public) can be more fully served. The libraries also engage in resource sharing and maintain a role of leadership. They want to help other libraries better serve their own clientele so that the general public has accurate information necessary for decision making and for a better understanding of health related issues.

The Denver Public Library, in June 1977, established a Regional Energy/Environment Information Center, which works closely with government agencies to make consumer and environmen-

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[32] Ronny Markoe, "The cooperative information network: A report," California Librarian 35: 16-21 (July 1974).

[33] Eleanor Goodchild, Sherrill Sorrentino, Mary Ann Berliner, and Joseph J. Cullen, "RINC: A resource information network for cancer, cancer center-library network," a presentation at the Medical Library Association Annual Meeting, Montreal, Canada, June 1981.

[34] Ibid.

tal information available for the ten state Rocky Mountain region. Serving as a centralized clearinghouse,

> "the center answers questions, makes referrals, and provides materials which are available. The staff utilizes the specialized materials of the Conservation Library, the DOE RECON data base, and other commercial data bases for which charges are assessed, and frequently, the staff relies upon the comprehensive information resources in other departments in Denver's Central Library. This supports the case for locating Federal information centers or other information services within the public library." (35)

It is interesting to note that individual libraries may compile information on consumer issues and community events into a centralized data base for efficient use by residents and local organizations. The Chicago Public Library has launched Dial-Pet, an information service "designed to answer many of the questions people have about the care, feeding, and training of pets of all kinds." The service consists of a collection of tapes, written by veterinarians and 300 animal experts, which are narrated by television personalities. (36) Kenneth E. Dowlin notes that the Pikes Peak Library District, Colorado Springs, Colorado,

> "Currently provides access to the complete inventory file of books and serials. In addition the club file, the adult education and recreation index, the community events calendar, the daycare directory, the Colorado Occupation and Career Information file, and the carpooling system for the metropolitan area are online in the Pikes Peak Library's computer." (37)

For example, the Colorado Career Information System (COCIS)

> "is a computerized information retrieval system which provides individuals with instantaneous access to accurate, current, localized information about occupations, training programs, employers, job search skills, and women's career resources information. A description of any of 260 occupations gives information on speciality and related work areas, aptitudes, work settings, hiring requirements and the current Colorado employment level, wage range, and

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[35] Colleen Cayton, "An uncommon cooperative venture," Library Journal 106: 21-25 (January 1, 1981).

[36] "Dial-Pet information service launched by Chicago Public," Library Journal 106: 928 (May 1, 1981).

[37] Kenneth E. Dowlin, "The electronic eclectic library," Library Journal 105: 2268 (November 1, 1980). Also see "Maggie's Place: Function statement," unpublished paper on Pikes Peak Library District, February 1, 1981.

> future outlook. You can get a list of employers throughout Colorado for any of the occupations or a profile of any employer listed. The employer list is only for the major employers in Colorado. The program gives information on job search skills (writing résumés), working women, and programs of study for occupations, and a bibliography for further information. You can also get information about skills and licensing requirements for occupations. This program is supplied and maintained by COCIS, Incorporated, Boulder, Colorado and provides extensive coverage of higher education in Colorado." (38)

On the other hand,

> "The DAY CARE file is a list of all the day care centers in the Colorado Springs area. The information included is the name of the center, the address, the phone number, the director's name and training, the closest elementary school and criteria for selection. It will list the number of children accepted, the number of vacancies left, the ages they accept, the times and the days of the week they are open and the number of complaints, if any, that are on file for each day care center. Whether they accept handicapped, abused, or neglected children and if they provide transportation is also included. The file can be searched by closest elementary school, name of center or by a specific need of the client." (39)

Conceivably, such community information is accessible in main and branch libraries, and other locations such as an area supermarket. (40) Apparently, the terminal located in the supermarket "is proving to be quite popular with the community." It "is in use almost all of the time that the store is open. At present, the public can access the Community Events Calendar, the inventory of the library's books, the file of adult education and recreation courses, and the file of human services agencies." (41)

According to Dowlin, The Pikes Peak Library District does not maintain an online computer program, providing consumer information to its patrons. The computer program, however, "contains information on free or inexpensive social and human services to the public."

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[38] "Maggie's Place: Function statement," p.7.

[39] Ibid., p. 5-6.

[40] Kenneth E. Dowlin, "The electronic eclectic library," p. 2269.

[41] Letter to Ching-chih Chen from Kenneth E. Dowlin, May 27, 1981.

> "Named CALL, this program contains consumer advocacy organizations in the area, special consumer programs of the local Better Business Bureau or the Chamber of Commerce, and the responsible consumer division of the Attorney General's Office. Our information specialists and reference librarians regularly use the CALL program, alongside the more traditional reference tools, to answer consumer-related question."
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> "Another related online program is COURSES, which provides information on all adult education and recreational courses, including instruction on consumer matters, in the region. This program is made available to patrons, using terminals located in public areas in the Library, and to our home computer users who can access the file directly from their homes." (42)

Dowlin emphasized that reference questions can be monitored so that librarians can locate subject areas in greatest demand allowing weaknesses in the reference collection to be noted and corrected. As he points out,

> "We keep track of all reference or search-related questions we receive and the number which we are able to provide answers to in a special computer program designed to store, retrieve, and manipulate statistics, called Datatrieve. The program, as it is now designed, permits us to learn the number of questions answered in any particular month, the percent change over the same month in the preceding year, and the total number of questions answered that year to date. A modification to the Datatrieve program would permit us to specifically tally only consumer-related questions or any other questions we were particularly interested in."
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> "From August through December 1980, our Information Services Division kept a manual tally of questions received. These questions were analyzed by subject categories to determine: a) the subject of the question, b) whether or not we were able to answer the question, and c) in cases where the question was answered, what materials were used, e.g., reference sources, circulating materials, other divisions of the library, or community agencies."
>
> "Of 1,613 questions recorded, 85 were consumer-related. Of those 85, 41 concerned automobiles, 21 concerned other consumer products, 13 concerned business, 6 legal counsel, and 4 medical services."
>
> "According to our calculations (and judgement), we were

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[42] Letter to Ching-chih Chen from Kenneth E. Dowlin, April 24, 1981.

able to successfully answer 85 percent of the automotive questions, 86 percent of the consumer product questions, 92 percent of the business consumer questions, and 50 percent of both the legal and medical consumer questions. We intend to use this data to identify weaknesses in our reference and information resources and to reinforce those areas. We are just beginning another six-month period of statistics collection for further analysis."

"In general, we have found that the public responds well to using a computer terminal to obtain information, and that our community resources files are regarded as an important information resource by the community." (43)

EVALUATION+

Various studies have examined criteria appropriate for evaluation, some of which deal with recall, product knowledge, and consumer perceptions. This last area would cover, for example, the extent to which the information presented was useful in making choices and the consumer's willingness to incorporate the information into decision making. (44) One study in the health field developed and tested a prototype system for facilitating the widespread dissemination of health information in a community. The effectiveness of the prototype network would be judged in relation to: "(1) use of information formerly available mainly through informal channels, and (2) referral linkages not predicated on the establishment of a new information facility." (45)

Individual networks, as mentioned earlier, are now supporting efforts to study their own cost/effectiveness and document delivery capability. If a generally useful and enlightening model can be devised, it must apply at the micro level. As already noted, an overriding problem is that so little

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+Network evaluation for this project is confined to the provision of consumer information services. Thus, studies evaluating general network effectiveness, specifically in terms of cost/benefits, systems capability, and operational efficiency (e.g., studies presented by Rouse and Rouse - see the end of the Bibliography of this Chapter) are not discussed in this section.

[43] Ibid.

[44] James R. Bettman, "Issues in designing consumers information environment," Journal of Consumer Research 2: 175-176 (December 1975).

[45] M. L. Dosa, Bissy L. Genova, and Michael J. McGill, "Development and evaluation of a health information sharing network," Proceedings of the American Society for Information Science 15: 102-104 (1978).

is known about the existing networks providing consumer information services. Prior to the formation of a model, descriptive research must categorize the types of networks and focus on individual characteristics. Such research must also identify similarities and differences among the various networks. (see Chapter 3 for further discussion on this topic.)

SUMMARY OF THE EXISTING LITERATURE

Existing literature helps us understand the extent to which consumer information is provided by library networks only in the context of information and referral services. It would seem, though, from the existing literature that library networks do very little in providing consumer information and that activities involving consumer information are not well publicized on a national level.

Libraries located in sparsely populated areas often lack the resources to answer consumer questions. By participating in a network they gain access to a wide range of reference materials which enable the public to cope with daily informational needs without having to travel long distances. Networks, specifically oriented to consumer issues, might aim at the general population or specific target groups such as the non-English speaking/reading, those who have been institutionalized, and those who are disabled or handicapped. Further, in some cases, consumers deal directly with networks; in others, libraries serve as the intermediary between networks and users.

Given the inadequacy of existing literature, we cannot know which networks provide what types of consumer services to what sort of clientele, without performing surveys of library and non-library networks ourselves. These studies were completed and the results are presented in Chapter 3. With these results, the researchers are able to determine the nature and types of consumer information services provided by the existing networks, and thus are better equipped to select the nine library and non-library networks for further extensive study (reports on these nine networks are included in Part II of this Report.)

Formation of the Electronic Library Association in 1981 is evidence that libraries are beginning to examine the implications of remote information delivery, in an effort "to ensure that electronic delivery of information remains accessible to the general public" and "to promote leadership in this area by public libraries and other non-profit organizations." (46)

In its CHANNEL 2000 experiment, the Online Computer Library Center, Inc. (OCLC) tested the electronic delivery of information to 200 selected households in Columbus, Ohio. The following types of computer data bases were linked to television sets

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[46] "Move to create within ALA an 'Electronic Library Association,'" Library Journal 106: 927 (May 1, 1981).

through telephones: the catalog of the local Columbus Pulbic Library; the full text of the Academic American Encyclopedia; locally generated data dealing with such subjects as employment, the environment, sports, and taxes; a directory of local education and entertainment events, and points of interest; mathematics and reading services developed by the College of Education, Ohio State University. Some test participants also received home banking services. It seems that those most willing to pay for the various services "tend to be heavy library users who are young, well educated, and affluent." These people want products that will save time. (47)

Of the six services offered, test participants were most willing to pay for the retrieval of information from the encyclopedia and card catalog of the library. A majority of the respondents (82%) favored the spending of tax dollars for such services as CHANNEL 2000; however, those interviewed emphasized that individuals should pay for home use, but the libraries should absorb the costs of in-house use. Also 41 percent believed that "their knowledge of library services increased as a result of the CHANNEL 2000 test, and 16 percent said they spent more time reading books after the experiment than before." (48)

As a result of the experiment, OCLC has concluded that "transaction services such as bill paying and catalog shopping will be the foundation of successful viewdata businesses." Further, "viewdata will not replace books and other print materials, which will continue to serve archival purposes. However, print will play a diminishing role in providing day-to-day, changing information." Libraries should, according to OCLC,

> "take a leadership role in determining viewdata's future... The reality of today's world is change, increasingly rapid change. As patrons accelerate into the future, libraries must as well. The alternative is irrelevance, and irrelevant institutions disappear." (49)

Undoubtedly, library information networks must undertake an expanded role as public servant in the coming decade. This study may serve as a catalyst to encourage libraries to further develop consumer services. Ralph Nader, who personifies the potential power of information, urges libraries "to reach out more" in the active provision of information as a means to survival in a

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[47] "CHANNEL 2000 viewdata test shows promise for libraries," American Libraries 12: 204 (June 1981). Also see CHANNEL 2000: Project Report. Dublin, OH: OCLC, Inc., Research Department, April 1981.

[48] Ibid., p. 305.

[49] Ibid.

fiscally insecure, power struggle environment. (50) Libraries can certainly aid in publicizing consumer services and assist consumer organizations by supplying competent referrals, the collection of appropriate source materials, and the construction of Selective Dissemination of Information (SDI) services, which involve the establishment of a system for reviewing new publications and information relating to the needs of specific clientele and the dissemination of this data through newsletters, etc.

As library networks accelerate toward a philosophy of public service tailored to the public's information needs, evaluation must take on less of a value neutral orientation and be concerned with such down-to-earth considerations as how much money they can save their clientele. In this way, they can more easily demonstrate their utility as a crucial link in the information environment. The library may want to move audaciously into the consumer information arena, and stake its claim to a share of the territory. As noted by Joseph C. Donohue, people who can approach libraries with confidence in seeking survival information will be more receptive to the role of libraries as educational institutions. (51) There may be logic, therefore, in building consumer information services into the facilities and resources of public libraries. Such is the belief of staff at those networks actively engaged in the provision of consumer information. (52)

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[50] Ralph Nader, "Remarks" in Information for the 1980s: Final Report of the White House Conference on Library and Information Services, 1979. Washington, DC: Government Printing Office, 1980. pp. 209-220.

[51] Joseph C. Donohue, Op. Cit., p. 170.

[52] The interview reports of the nine selected networks included in Part II of this Report substantiate this belief.

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Rouse, William B., "Performance criteria for library networks: Theoretical basis and realistic perspectives," in Library Resource Sharing edited by Allen Kent and Thomas J. Galvin. New York: Dekker, 1977. pp. 295-302.

Periodical Articles

Rouse, William B., "A library network model," Journal of the American Society for Information Science, 27: 88-99 (1976).

Rouse, William B. and Sandra H. Rouse, "Analysis of library networks," Collection Management, 3: 139-149 (Summer-Fall 1979).

Rouse, William B. and Sandra H. Rouse, "The effect of parameter uncertainties on the predictions of a library network model", Journal of the American Society for Information Science, 29: 180-186 (1978).

ERIC Document

Rouse, William B. and Sandra H. Rouse. Application of A Library Network Model: A Case Study of the Illinois Library and Information Network. Urbana, IL: University of Illinois, 1978. (ED-163-931).

[+] It is impossible for us to list the abundant literature available on this topic. Therefore, we have chosen to list a few sample studies by the same authors to illustrate the kind of studies under the category.

CHAPTER 2

ASSESSMENT MODEL

As was noted in the RFP No. 80-76, public libraries have placed increasing emphasis upon the provision of information and referral services to citizens. These library based information and referral services have evolved from a desire to promote public access to consumer information and to provide a service with politically visible utility to a new constituency. To this increasing commitment for information and referral services has been added the concept that networking offers an improved information delivery system. While improved information services and networking rank high on any library's agenda, network effectiveness has been evaluated customarily on the basis of cost effectiveness and document delivery capabilities. This is because library networks, for the most part, were not developed specifically to meet consumer information needs. Most library networks have been initiated for resources sharing purposes. In other words, in the face of financial difficulties, networks have been formed to provide network information users access to maximum information sources at the lowest cost possible to individual network members. Yet, effectiveness covers other factors as well. With this in mind, this chapter presents an assessment model that can be used in examining library and other information networks that provide citizens with consumer information.

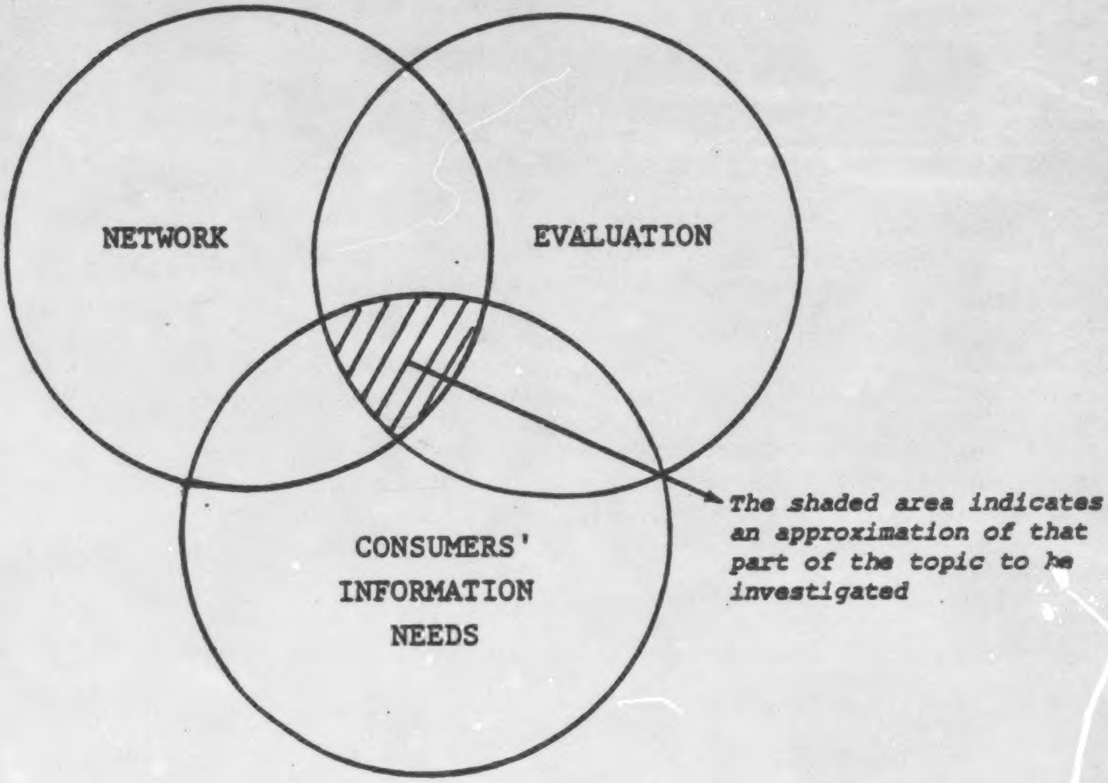
Figure 2.1 conceptualizes the assessment model, which examines the effectiveness of networks in meeting consumers' information needs. The purpose of this model is to identify considerations that may contribute to a network's success or failure in meeting consumer information needs. Once the various considerations were identified, they were tested operationally in an attempt to see if factors could be added, deleted, or refined. Chapter 5 will examine the various considerations identified and explain which were successful or unsuccessful in creating an effective information environment.

DEFINITION OF CONSUMER INFORMATION

Chapter 1 has provided a brief definition of "consumer information". It seems essential to further define this term prior to the development of an assessment model.

Consumer information is that information needed by the general public to resolve problems within the family or household. People seek the information to assist them with everyday problems including, among others, those related to money matters, health, housing, and energy. The emphasis is on situations where the person is not paid to gather the information. The following examples represent topics that fall outside this definition of consumer information:

Figure 2.1. Effectiveness of Networks in Meeting Consumer Information Needs - A Conceptual Model for Research


NETWORK
EVALUATION
CONSUMERS' INFORMATION NEEDS
The shaded area indicates an approximation of that part of the topic to be investigated

- Student getting information for an academic purpose (e.g., term paper)
- Small businessmen wanting to know how to market their products or what their rights are in relationship to another firm
- People wanting to clarify their relationship with government agencies. Users of government services will not be regarded as consumers of that service (e.g., the person not receiving the social security check)
- Student wishing to sue the university for misuse of their records.

The study, as shown in Chapter 4, did uncover a variety of definitions of consumer information. It was found, during the course of conducting the telephone survey of library networks, that the respondents may not have paid careful attention to the definition of consumer information when it was offered during the phone conversations. Perhaps they wanted to place their networks in the best light and to appear actively engaged in the provision of consumer information services.

As to the case studies of the nine selected networks, the results are based upon interviews with members of these networks. During the interviews, network staff presented their opinions and experiences based upon their own memory and/or written documents. The researchers neither attempted to verify the accuracy of the responses nor to test the ability of each individual network to provide consumer information. The investigators were more interested in identifying factors for consideration in the development of the assessment model than in developing reliable and valid test criteria. It should be noted that some of the network staff members would have been less candid in their replies and comments if they believed that the researchers intended to go beyond the respondents' oral statements as well as those contained in the selected internal documents.

OVERVIEW

Table 21 depicts the areas for consideration in developing criteria of effectiveness of networks in meeting consumer information needs. The thirteen areas were derived from an analysis of the existing literature, extensive discussions at the Advisory Group meetings, the experiences of the Group members with present networks, as well as the findings of a previous study conducted by the researchers. (1)

A PHILOSOPHY OF SERVICE

Articulation of a philosophy of service potentially comprises an important area for consideration. This category encompassess the type and extent of services provided. For example, do libraries merely point patrons in the direction of relevant source material, while non-library networks are more likely to assist patrons in problem-solving, gaining access to the most recent and accurate information, and interpreting or enhancing the understandibility of the information found?

These examples suggest that service can be classified into

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[1] Ching-chih Chen and Peter Hernon, Information Seeking: Assessing and Anticipating User Needs. New York: Neal-Schuman Publishers, 1982. See also Ching-chih Chen and Peter Hernon, A Regional Investigation of Citizens Information Needs in New England: Executive Summary Report and Final Report. (Research project supported by the Office of Libraries and Learning Technology, U.S. Department of Education, Project No. 475-AH-90031). Boston, MA: Graduate School of Library and Information Science, Simmons College, 1981.

Table 2.1. Areas of Consideration in Developing Criteria of Effectiveness of Information Networks in Meeting Consumer Information Needs

1. Definition of consumer information
2. Types of consumer information that networks are providing (clearly formulated goals and objectives)
3. Availability of information services to consumers. (Are the services available directly to users or to libraries?)
4. Sources and levels of current and forthcoming fundings
5. Staffing (number of staff, change in staffing, morale, role of activists, etc.)
6. Degree of support from member libraries and administration
7. Service (articulation of a philosophy of service, cost of service, involvement in referral practices, etc.)
8. Relationship to other networks
9. Priority of consumer information services among network activities. (Are they the only activities? What else does the network do? Is there a perceived need for the services? Does the library play an active role in the provision of such services?)
10. Activities engaged in
    - information acquisition and organization
    - information dissemination
    - information referral
    - document delivery
    - information interpretation/advice
    - consumer education
    - advocacy
    - lobbying
    - problem-solving
11. Relative importance of criteria in providing information:*
    - cost in money
    - cost in time
    - accuracy
    - up-to-dateness
    - understandibility
12. Publicity and marketing
13. Determination of user satisfaction (Implementation of formal evaluation component)

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*While conducting the investigation into the information needs of New England residents (see Footnote #1), the information providers consulted, especially those labeled as most and least helpful, were examined, and the reasons for use and non-use of libraries were specifically probed. Generally speaking, accuracy of the response (27.9%) and understandability of the information (23.6%) were regarded as the most important. Costs in money and time were third (18.9%) and fourth (17.1%) respectively. The up-to-dateness of information supplied was perceived by residents to be a minor consideration (6.6%). Often in situations, the distinctions between any two criteria can be blurred and subtle. Thus, it was decided that the five criteria would comprise one consideration of the assessment model.

three categories: conservative, moderate, or liberal. (2) In some instances, personnel might merely show users how to find answers for themselves. In other cases, they might point out which reference source might be useful but would only actively assist users when further assistance was requested. In these cases, referral service would definitely not be viewed as necessary or as an integral part of reference services. These examples illustrate conservative and moderate type of services. On the other hand, liberal service involves staff members consistently finding the answer or the sources from which the answer can be obtained. Personnel are both willing and eager to assist patrons, even if this involves drawing upon external resources. Presumably specialized networks devoted to one topical area most closely attempt to implement the liberal approach.

RESEARCH QUESTIONS

Table 2.1 displays the areas essential to the formulation of an assessment model. Each of these areas form the basis around which research questions can be raised. Some of these questions are listed in the following:

1. DEFINITION OF CONSUMER INFORMATION

    - Will the networks have articulated a clear definition?
    - Will the networks hold a similar definition of consumer information?

2. TYPES OF CONSUMER INFORMATION THAT NETWORKS ARE PROVIDING

    - Will the networks have articulated clearly defined goals and objectives acceptable to all member libraries?
    - Will the networks have "institutionalized" their consumer information programs?
    - Will the networks have implemented consumer information services on a selective basis?
    - Will the networks have developed services of great demand, which appeal to a broad audience?
    - Will the networks have determined target populations and actively work with them?

3. AVAILABILITY OF INFORMATION SERVICES TO CONSUMERS

    - Will the networks limit their services only to libraries?
    - Will the networks' services be available directly to users as well?

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[2] For a more complete discussion of the categories, see James I. Wyer, Reference Work. (Chicago, IL: American Library Association, 1930) and Samuel Rothstein, "Reference service: The new dimension in librarians," College & Research Libraries 22: 11-18 (January 1961).

4. SOURCES AND LEVELS OF FUNDING

- Will the networks be dependent on funding, in particular from the Federal Government, for the initiation and continuation of consumer information services?
- Will the networks be dependent on outside funding for their survival?

5. STAFFING

- Will the success of the networks be linked to the number of staff?
- Will the staff believe that they are performing a vital role?
- Will the networks currently be expanding the number of staff and services?
- Will the networks have no readily apparent problems related to staff morale?

6. DEGREE OF SUPPORT FROM MEMBER LIBRARIES AND ADMINISTRATIONS

- Will the networks have the full support (financial and other) from member libraries and their administrations to continue their consumer information services?

7. SERVICES

- Will the networks have articulated a philosophy of service?
- Will the networks provide consumer information services gratis?
- Will the networks perceive the provision of referral services as an essential aspect of their activities?
- Will the networks be able to provide personal and aggressive reference services?

8. RELATIONSHIP TO OTHER NETWORKS

- Will the networks have identified other networks providing consumer information services and attempted to work with these other networks?

9. NETWORKS' PRIORITY ON CONSUMER INFORMATION SERVICES

- Will the networks focus largely or exclusively on consumer information services?
- Will the networks have responded to perceived needs for consumer information services?
- Will the networks plan to expand their consumer information services over the next several years?
- Will the networks play an active role in the provision of consumer information services?

10. ACTIVITIES ENGAGED IN

- Will the networks be actively engaged in information interpretation and advice?
- Will the networks be in agreement concerning the activities which libraries should engage in?
- Will the networks view information interpretation/advice and problem-solving as crucial areas for libraries to develop their consumer information services?

11. RELATIVE IMPORTANCE OF CRITERIA IN PROVIDING INFORMATION

- Will the networks be in agreement concerning the relative importance of the five criteria?

12. PUBLICITY AND MARKETING

- Will the networks exploit a variety of publicity techniques?

13. DETERMINATION OF USER SATISFACTION

- Will the networks have undertaken a formal needs assessment and have gathered data on user satisfaction?
- Will the networks be in agreement concerning the methods for determing user satisfaction?

TYPOLOGY OF NETWORKS

There are many lists of networks. One such list identifies local, cooperative, and Federal Government networks. (3) Although not comprehensive, the listing, does suggest that service functions can be examined and that networks can be classified such as by: 1) public library consortia, 2) State agencies, 3) more than one type of library, 4) types of resources that they provide (e.g., government publications), and 5) diverse subject areas. (See Figure 2.2).

With this list as well as other available lists of library networks, the researchers decided to make heavy utilization of the *Directory of Library Networks & Cooperative Library Organizations*. (4) This *Directory* is both current and extensive. It provides sufficient information on each library network, which

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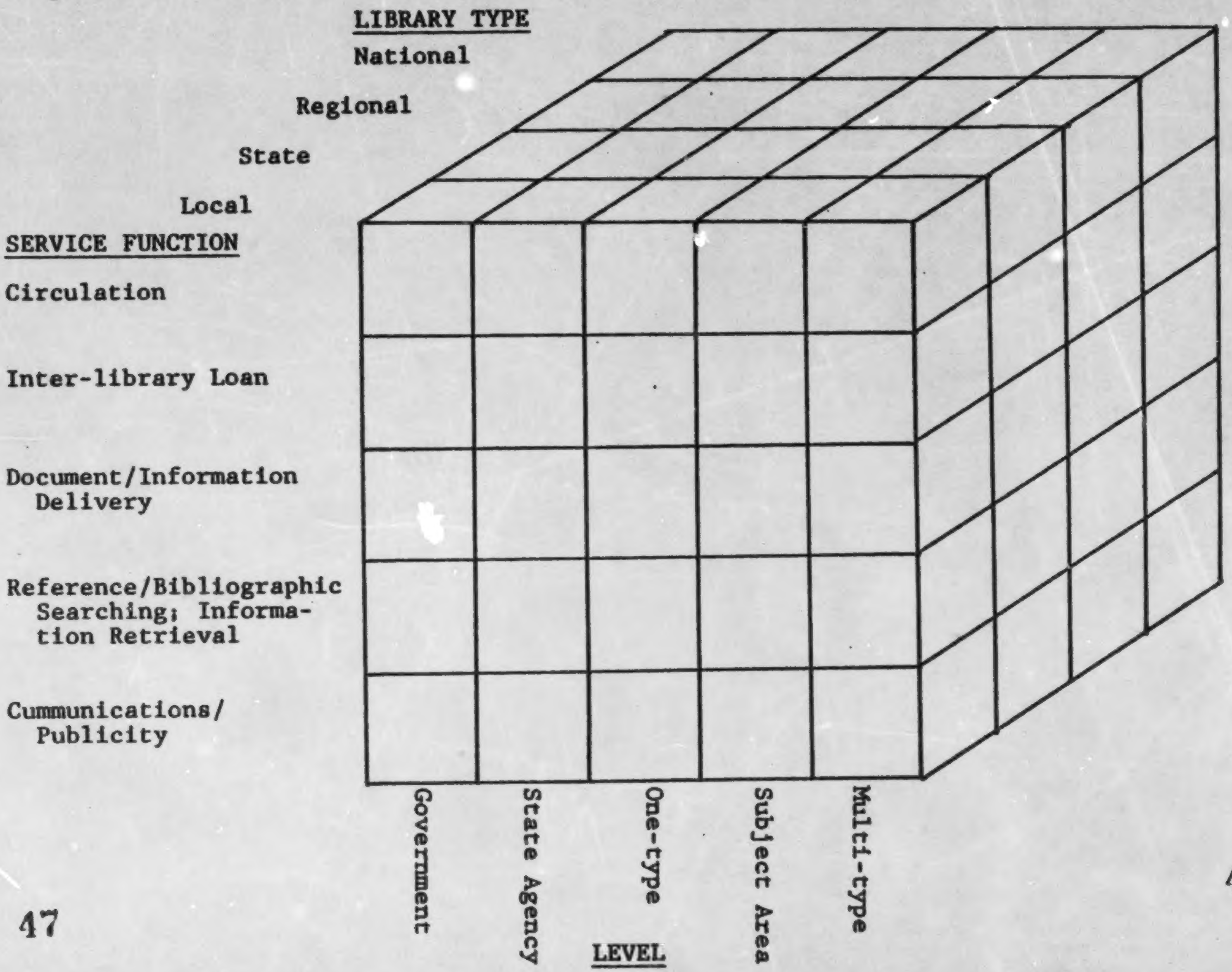
[3] Brenda White, "Cooperatives and networks," in *Networks for Networkers*, edited by Barbara E. Markuson and Blanche Woolls. *New York*: Neal-Schuman Publishers, 1980. pp. 320-334, 345-368.

[4] U.S. Department of Education. National Center for Education Statistics. *Directory of Library Networks & Cooperative Library Organizations*. Washington, DC: Government Printing Office, 1980.

Figure 2.2. Examples of Networks Grouped by Service Function, Library Type, and Level


LIBRARY TYPE
National
Regional
State
Local
SERVICE FUNCTION
Circulation
Inter-library Loan
Document/Information Delivery
Reference/Bibliographic Searching; Information Retrieval
Cummunications/Publicity
Government
State Agency
One-type
Subject Area
Multi-type
LEVEL

will enable the researchers to classify the library networks by service function if necessary. Furthermore, with the background information available in this source, the researchers can reduce sharply the required time necessary to gather the data on library networks.

Since the total number of library networks providing consumer information services had not been previously documented, it was decided, in consultation with the Advisory Group, that the researchers first identify, from the 620 library networks, as listed in the above mentioned directory, the number of existing library networks actually providing consumer information services. Once the number had been identified, then the researchers could categorize the networks by type. Thus, a survey of the existing library networks had to be undertaken as a preliminary step to this contracted project (see Chapter 3 for more detailed discussion). Only after completing this survey, could the typology of library networks relevant to this project be determined.

In addition to library networks, it is also essential to include non-library networks in this study, since many networks of this nature are actively involved in very exciting activities in providing consumer information services. Thus, it is necessary, as well, to elaborate on the typology of non-library networks as another preliminary step prior to the beginning of this project. This categorization was completed on the basis of the information gathered from the literature search as well as consultation with such people as Mr. Joseph McDonough of the Advisory Group and Mr. Henry Drennan, then the Project Officer for the Office of Libraries and Learning Technology, U.S. Department of Education (also see Chapter 3).

Once the typology of both library and non-library networks has been clearly defined, the nine networks, called for in the RFP, can then be selected. The process of selection and the criteria used for the selection of these nine networks are again elaborated in Chapter 3.

METHODOLOGY

After having formulated the areas for possible inclusion in the assessment model, and having identified the range of pertinent library and non-library networks, the researchers selected the stipulated nine networks in order to accomplish the following purposes:

- to verify that the tentative areas displayed in Table 2.1 seem to be reasonable
- to gather data on the research questions listed earlier
- to determine if other areas could be added to the assessment model.

An Interview Guide was developed to gather data in order to examine the research questions in the contexts of the nine selected networks. A complete copy of this Guide is included as Appendix I. The Guide consists of the following sections:

- the organizational structure of the network
- network goals and objectives
- goals for the consumer information services
- the consumer information services currently provided and those in the planning stage (e.g., target audience and how and why the services began)
- relationship to other networks
- fund allocation
- staffing
- network activities
- publicity of consumer services
- types of sources used in providing consumer information services
- the five criteria in providing consumer information services (e.g., cost in money and time)
- information transfer and new technology
- clientele and needs assessment
- user satisfaction
- future role of libraries in providing consumer information services
- background information on the network.

Chapter 4 provides a general summary of the major points discovered during the course of the on-site interviewing. For greater detail, readers are encouraged to consult the reports concerning individual case studies (see Part II of this Report. Chapter 5 then focuses the discussion on networking and the research questions posted earlier in this chapter.

LIMITATIONS OF THE ASSESSMENT MODEL

The Interview Guide was intended to provide an overview of each of the nine selected networks and its consumer information services. It cannot be regarded as an instrument for a precise evaluation of a network's effectiveness. Some items in the Interview Guide may not be appropriate in a particular case. Variations as to each network's target audiences, definition of consumer information services, etc., all inhibit generalization and affect the precision of developing a comprehensive assessment model. For example, answers to questions pertaining to the current financial situation faced by a network may reflect uncertainty due to the present funding situation under the Reagan Administration or Proposition 2-1/2 in Massachusetts or 13 in California.

The assessment model cannot really deal with the cost-benefit impact of single libraries (members of a network) directly on citizens or measure such benefits on the networks themselves. Networks do not always benefit citizens directly; they may benefit libraries which in turn benefit users. One would have to separate the activities that a member library engages in that do not depend on the network from those activities that are dependent on the network. This separation of activities would have to be performed on formal library networks as opposed to the informal information and referral (I&R) networks of libraries and social service agencies. Such research, however, is beyond the scope of this present, exploratory study.

It should be remembered that the study only examines consumer information services provided in a network context rather than focusing on the range of services that individual libraries may provide as part of their own information and referral services. Perhaps many libraries find that they can meet the consumer information needs of their clientele without resorting to networking. The testing of such an assumption is beyond the scope of this study. Yet, the study does seem to show that in certain contexts, networking is beneficial for meeting consumer information needs.

Furthermore, library and non-library networks operate with widely divergent definitions of consumer information. In order to approach the telephone and on-site interviewing in a consistent manner, the definition of consumer information, noted earlier in this chapter, was provided. However, the problem of a lack of consensus concerning a definition still exists.

Finally, there are limitations to the study in terms of the selection of only nine networks for in-depth study. The project had to resort to individual case studies which (as shown in Part II of this Report) did not permit a precise determination of effectiveness or statistical comparison. This point will be further discussed in Chapter 3.

CHAPTER 3

LIBRARY & NON-LIBRARY NETWORKS PROVIDING CONSUMER INFORMATION SERVICES

In response to recommendations made at the first Advisory Group meeting described earlier in Chapter 1, the research team felt the necessity to determine the range and extent of consumer information services currently provided. To do this, they made an extensive investigation of library networks (conducted by telephone interviews), and a selective study of existing non-library consumer information networks.

SURVEY OF LIBRARY NETWORKS

From February to May 1981, the research team surveyed the 620 library networks identified in the *Directory for Library Networks and Cooperative Library Organizations* (published by the National Center of Education Statistics, 1980); see Appendix II for a copy of the questionnaire. The purpose of the survey was to determine which networks offer consumer information relating to money matters or issues such as health, housing, or energy. The assumption was that even those networks identified in the *Directory* were more than likely engaged in information referral or document delivery, rather than in the provision of the information themselves.

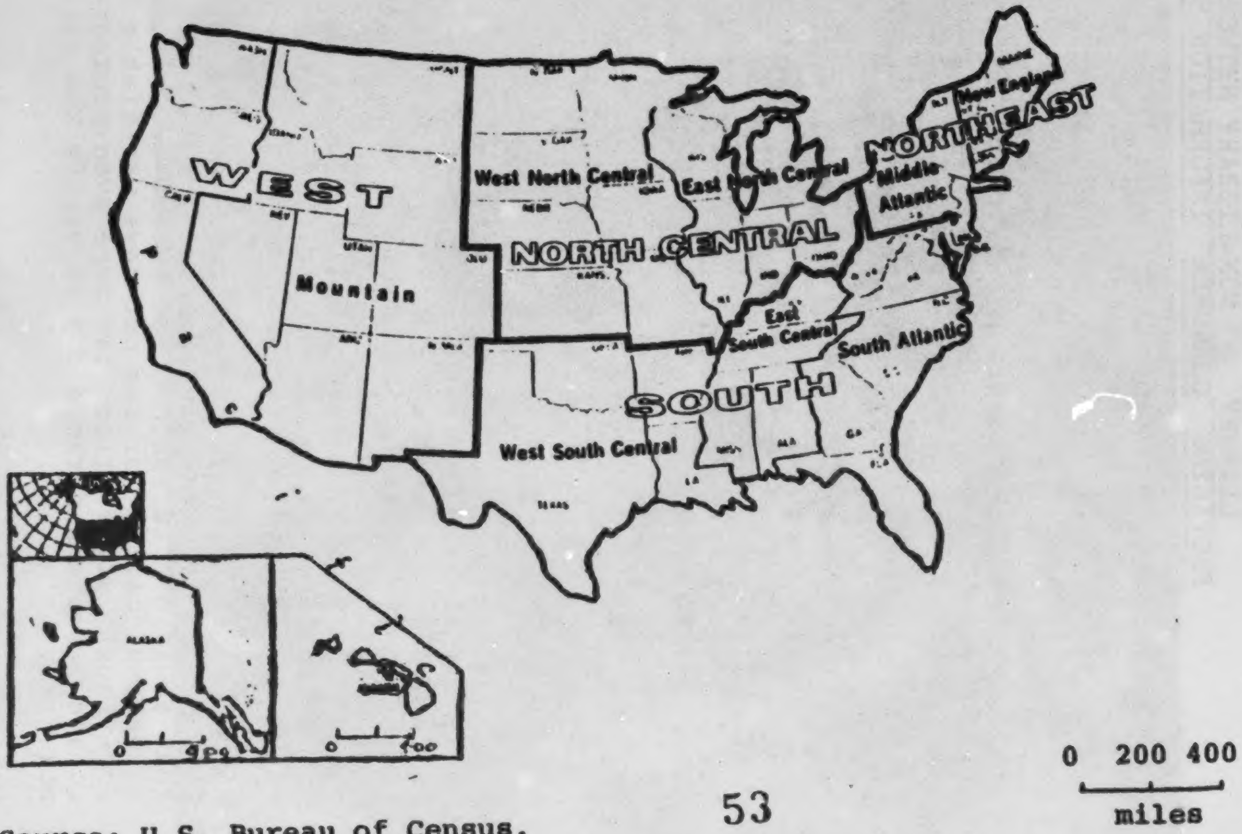
For the purpose of analysis, responses were grouped by state, regions and other geographic subdivisions used by the U.S. Bureau of the Census in reporting its data. As depicted in Figure 3.1, the United States is first divided into four divisions: the Northeast, North Central, South, and West (which includes Alaska and Hawaii). Each division is then subdivided into two or three regions. The Northeast, for example, consists of the Middle Atlantic States and New England.

The research team interviewed staff members from 578 (93.2%) of the 620 networks listed in the directory. The 42 networks that could not be reached had become defunct, did not answer the telephone calls, or did not have verifiable telephone numbers. Individual state libraries were even contacted in an effort to locate telephone numbers and to verify the existence of these 42 networks.

LIBRARY NETWORKS PROVIDING CONSUMER INFORMATION SERVICES

Table 3.1 indicates that 128, or 22.1 percent, of the 578 responding networks claim that they currently offer information to help people with their daily problems. The percentages for networks providing such information are similar for the Northeast (27.0%) and South (26.7%), but significantly lower in the West (20.9%) and North Central (16.8%). It should be noted that the

Figure 3.1. Map of the U.S., Showing Census Divisions and Regions


WEST
Mountain
West North Central
East North Central
NORTH CENTRAL
New England
NORTHEAST
Middle Atlantic
East South Central
South Atlantic
SOUTH
West South Central
0 200 400
miles

Source: U.S. Bureau of Census.

Table 3.1 Library Networks and the Provision of Consumer Information by Geographical Divisions and Regions

Division Region	Number providing	% of total	Number Not Providing	Total Number of Networks
NORTHEAST	37	27.0	100	137
New England	11	20.4	43	54
Middle Atlantic	26	31.3	57	83
SOUTH	36	26.7	99	135
South Atlantic	21	29.1	51	72
East South Central	9	33.3	18	27
West South Central	6	16.7	30	36
NORTH CENTRAL	37	16.8	183	220
East North Central	30	23.8	96	126
West North Central	7	7.4	87	94
WEST	18	20.9	68	86
Mountain	6	20.7	23	29
Pacific	12	21.0	45	57
TOTAL	128	22.1	450	578

largest number of networks are located in this last division, covering such states as Illinois and Michigan. Greater variations in percentages can be found when the networks are examined on a regional basis. The following represents a ranking of regions by percentage:

East South Central	(33.3)
Middle Atlantic	(31.3)
South Atlantic	(29.2)
East North Central	(23.8)
Pacific	(21.0)
Mountain	(20.7)
New England	(20.4)
West South Central	(16.7)
West North Central	(7.4)

Networks providing consumer information seem to cluster within a few states. In New England, nine of the eleven networks displayed in Table 3.1 are from the states of Connecticut and

Massachusetts. New York has twice as many networks providing such information than do any of the other Middle Atlantic states. Maryland alone accounts for more than one third (38%) of the networks in the South Atlantic region. All but one of those located in the East South Central region can be found in Alabama and Tennessee, while in the East North Central, Michigan and Illinois alone accounted for two-thirds. The West North Central has only seven such networks, three of which were in Kansas. The networks in the West South Central were almost evenly distributed among three states: Texas had one more than either Arkansas and Louisiana (there were none in Oklahoma). Two-thirds of the networks in the Pacific region are in California. All networks in the Mountain region are located in either Colorado or Idaho. Overall, nine states account for 74, or 57.8 percent, of the networks offering information to help people with their everyday problems. Listed in order of the number of networks held, these nine states are:

• New York	(16 or 12.5%)
• Michigan	(10 or 7.8%)
• Illinois	(10 or 7.8%)
• Maryland	(8 or 6.2%)
• California	(8 or 6.2%)
• Pennsylvania	(7 or 5.5%)
• Connecticut	(5 or 3.9%)
• New Jersey	(5 or 3.9%)
• Wisconsin	(5 or 3.9%)

Before further analyzing the questionnaire responses from networks offering but not providing consumer related information, the broad characteristics of the 578 responding networks were examined. Statistically significant differences did not emerge for the date that the networks became operational, whether or not they are computerized, the number of staff, library type (e.g., multi-type library network), and the annual budget. (1) In effect, for these characteristics, networks providing and not providing such information are indeed similar. Incidentally, half (298 or 51.6%) of the respondents were from multi-type library networks.The majority of networks offering consumer information have been in existence since 1960 (115 or 90%), were computerized (87 or 68%), with no more than fifteen staff members (84 or 65.6%), and budgets under $300,000 (88 or 68.7%).

Regardless of geographic division and region, the networks were most likely to be engaged in reference, training and education, circulation,or interlibrary loans. Overall, reference was the most frequently mentioned activity; interlibrary loan was the

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[1] See U.S. Department of Education, National Center for Education Statistics. Directory of Library Networks and Cooperative Library Organizations. Washington, DC: Government Printing Office, 1980, which provides background information on individual networks.

least. This frequency ranking varied somewhat from division to division: reference was most often mentioned in the South and West; both reference, and training and education were suggested equally by respondents in the North Central; circulation, training and education placed first in the Northeast.

When those networks offering consumer information services described their services, they emphasized the provision of information and referral (54 or 42.2%), the servicing of member libraries (e.g., hospitals) (31 or 24.2%), services related only to specific issues (e.g., health) (21 or 16.4%) the maintenance of community information files (18 or 14.1%), servicing specific client groups (e.g., government officials, members of the armed services, the elderly, and hospital patients for information on their illnesses and treatments) (21 or 16.4%), provision of online bibliographic searching (18 or 14.1%) and other (10 or 7.8%). (2) Regardless of individual geographic division, information and referral was the single most frequently mentioned service. There were variations among the subsequent rankings; application of a non-parametric test, the Spearman Rank Order, however, did not indicate significant differences. On a regional basis, with the exception of the Middle Atlantic and East North Central, information and referral was most frequently mentioned. In these two cases, document delivery ranked first, with information and referral second.

As already noted, some of the library networks surveyed provide informational and recreational sources for special groups. For example, the elderly and the blind who have been institutionalized, for whatever reason, might receive cassettes and large print, braille or talking books. For the non-English speaking, information is available in their own language, and for the illiterate, non-print materials are provided. Resources for these groups, as well as other segments of the population, might be provided through such means as the maintenance of information, agency, and human resource files; cooperative collection development including resource sharing and interlibrary loan; job information centers; toll-free numbers for consumer hotlines; career counselling services; consultant services (such as network personnel providing staff training sessions, assisting in the preparation of bibliographic aids, and evaluating member libraries' collections); and availability of lectures and seminars on such topics as inflation fighting. A central objective for many of these library networks is to assist persons in search of information to find what they seek, whether it is in the collection of the library or whether it involves referral to another information provider. Toward this end, library networks may develop location files and directories of agencies, organizations, and collections to facilitate their referral capabilities.

At this point, it might be useful to mention four specific

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[2] Respondents could suggest as many categories as were appropriate.

library networks and their programs. The Illinois Library and Information Network (ILLINET) is a statewide network composed of library systems, research and reference centers, and public, academic, special and school libraries. The Great River Library System, one part of ILLINET, will assist legal researchers, upon request from special or public libraries, in locating information contained in the law collections of the University of Illinois Library and the Illinois State Library. The Monroe County Library System, Rochester, New York, operates a job information center which provides guidance and information on the employment outlook and how to apply for jobs. The Community Information Service of the New York Public Library, supported by funds from the Library Services and Construction Act (LSCA) and by the branch libraries of the New York Public Library, maintains a directory of community services and a special resource collection which provides access to information concerning essential services in the immediate area.

The Southern Tier Library System of Corning, New York, operates Library Line. Through a toll-free telephone number, librarians and patrons from a multi-county basis receive answers to a wide range of reference questions. Such a service is advantageous to communities that lack the benefits of full-time library services and that want an after-hours extension of local library service. The objective of Library Line can be summarized as follows:

- to demonstrate high quality telephone reference service
- to link the service to local institutions by referring patrons to the nearest public library
- to test an area-wide telephone reference service as a prelude to state-wide service
- to overcome the cost barriers through utilization of telephone reference service in rural areas by providing a toll-free operation
- to test the methods of advertising such a service.

All four of these networks support the basic premise of networking in general: that the library must expand its services and functions through any means possible in order to meet the needs of the information-seeking public. When the 128 networks providing consumer services were asked if consumer services were provided directly to users, 72 (56.2%) of them indicated that they did, whereas 46 did not. Application of the Spearman rho indicated moderate agreement (rho=.63). Networks providing services directly to users were more likely to maintain community information files and to provide on-line bibliographic searching directly to users.

As shown in Table 3.2, the networks were most likely to provide document delivery and the provision of information for problem-solving, with certain divisional variations. For the South and West, information referral was suggested most frequently, but document delivery rated a close second. Conceivably the research team and staff members from the networks did

Table 3.2. Attributes of Network Service

Network Service	North East	North Central	South	West	Row Total
	Number of Network				
Provision of information for problem-solving	23	24	21	9	77
Information referral	27	27	26	16	57
Document delivery	29	34	23	14	100
Online bibliographic searching	1	-	1	2	4
Other (e.g., conducting workshops)	5	1	-	1	7

not look on the category of provision of information in a similar manner. This category could be interpreted in different ways. For example, some respondents might assume that they fit this category by merely holding appropriate source materials, while others saw the category in a more active, dynamic light. The questionnaire administered in the brief telephone interview relied on self-reporting of the responding administrator; in some cases, respondents might have tried to represent their network in a certain way.

The services are provided primarily by three means: in-person to requestors (69 or 95.8% of 72 cases), by telephone (66 or 91.7%) or by mail (50 or 66.7%). (3) In a few cases (less than 2%) the networks used such techniques as bookmobiles, and delivery vans. In the 46 networks in which the services were not provided directly to users, the services were offered primarily through member libraries.

Table 3.3 displaying the primary user groups receiving consumer services, shows that the general public is by far the largest group. This pattern holds regardless of geographic division. If the various groups comprising the category "special population" are merged, this category is second in overall importance. Variations in category ranking, however, occur on the basis of geographic division. Collapsing the statistics for single- and multi-type libraries into one category can better reflect libraries' use of the networks' consumer services.

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[3] Respondents could suggest as many options as they deemed appropriate.

Table 3.3. Primary Users of the Networks' Consumer Services*

Network User Group	North East	North Central	South	West	Row Total
	Number of Networks				
Academic community	2	-	4	1	7
Client groups (e.g., patients)	2	1	2	1	6
Displaced homemakers	1	-	1	-	2
General public	17	18	18	7	60
Libraries: multi-type	3	3	2	3	11
Libraries: single-type	3	7	2	-	12
Professionals (e.g., health professionals)	3	5	5	1	14
Special populations:					
• Blind and deaf	-	3	1	-	4
• Correctional institutionalized	-	1	1	1	3
• Elderly	3	1	4	-	8
• Handicapped	1	-	-	-	1
• Minorities	3	-	1	-	4
• Other	3	-	4	-	7
Students	4	2	4	3	13
Total	45	41	49	17	152*

* Respondents mentioned as many groups as they felt appropriate.

Before concluding the discussion of the survey responses, an analysis of those networks not providing consumer information is in order. Over three-fourths of the responding networks (450 or 77.9% - see Table 1) do not presently offer such information.

NETWORKS NOT PROVIDING CONSUMER INFORMATION SERVICES

Once it was ascertained which networks did not offer information to help people with their everyday problems, the research team queried whether they ever had. Only 6, or 1.3 percent, responded in the affirmative. All of these were located in either the North Central or South divisions. They had terminated the service since 1978 primarily due to insufficient funding and a lack of publicity.

The next question probed whether or not the network planned to provide a consumer service. Only 21, or 4.7 percent, had such plans. Yet, this percentage is misleading. Officials from four networks actually specified a year (1982, 1983, or 1984), whereas the rest were more vague in their responses: they mentioned in the near future or when funds became available. As is evident, less than 1 percent (0.9 or 4 networks) actually specified plans for offering information to help people with their everyday problems. These were adding the service because they saw a need for it, they had received a grant for developing it, and/or because member libraries requested it. As one network official noted, "the trend in the medical library field is to provide such a service." Networks associated with health issues and patient education were most likely to be planning such a service.

Table 3.4 reflects the reasons why the networks are not planning to provide consumer information. A large percentage (30.8%) did not specify a reason for not providing such a consumer service. When a reason, however, was given, it was usually either that the network was not meant to serve the general public or that such a service was not one of the network's objectives. The lack of funding was a secondary consideration. Only in the case of the Mountain region was insufficient funding mentioned more than the fact that such a service was not a network objective.

A few concluding observations are in order. First, only 22.1 percent of the responding networks currently provide the type of information under study; even this percentage may be an over representation. The research team relied on the self-reporting of the network official on-hand to answer the survey. As previously noted, this process transmits only the institutional self-perceptions. It is possible that an official might present a service he or she believes the network adequately provides, even if it does not. Alternatively, he or she might have believed that the collection and loaning of books, pamphlets, and other assorted printed materials, as well as the development and maintenance of community information files, satisfied the requirement for the provision of information to help people with their everyday problems. Audiovisual networks, for example, met the requirements of the survey if they loaned films which dealt with consumer issues. These problems underscore the difficulties associated with conducting a valid and reliable telephone survey on the nebulous topic of consumer information services.

Analysis of the networks not providing the consumer services indicates that the vast majority of library networks do not see a specific priority in this area. Apparently member libraries are not demanding network involvement and do not perceive a need for

Table 3.4. Those Library Networks Not Planning to Provide a Consumer Information Service and Their Reasons for Not Doing So

Geographical Area	Another Network Does It	Not Meant to Serve General Public	Not Related to Network Objective	Lack of Resources		Unspecified	Total
				Personnel	Funding		
NORTHEAST	11	28	24	2	6	25	96
New England	-	17	8	-	3	13	41
Middle Atlantic	11	11	16	2	3	12	55
SOUTH	4	25	26	2	4	34	95
South Atlantic	3	17	8	1	2	18	49
East South Central	1	2	8	-	2	5	18
West South Central	-	6	10	1	-	11	28
NORTH CENTRAL	10	47	58	2	4	52	173
East North Central	2	31	26	2	3	25	89
West North Central	8	16	32	-	1	27	84
WEST	1	21	14	2	6	21	65
Mountain	1	8	3	1	5	3	21
Pacific	-	13	11	1	1	18*	44
TOTAL							429

*Two of these are now defunct.

network assistance. If more libraries begin to perceive a need, they might want to expand the priorities of existing library networks, to create new library networks, or to affiliate with other networks of a non-library nature, so that they can further develop their referral capabilities and serve as general mediators of the information environment. This study attempts to examine and contrast both library and non-library networks so as to place library networks in proper context. In this way, the research team can explore ways to generate greater cooperation between the two and determine the ultimate impact of library and non-library networks upon information consumers.

NON-LIBRARY NETWORKS

Consumer issues comprises an area of increasing public concern: citizens want prompt resolutions of information needs and the opportunity to voice their opinions. A number of consumer groups are active at the local level, and an increasing number of national and state clearinghouses are emerging to provide information and resources. There is a proliferation of toll-free telephone numbers for the provision of information on such diverse subjects as lawn and dental care: Crest, for example, maintains a number for questions and comments on its toothpaste, while Scotts answers telephone queries about lawn care. Blue Cross/Blue Shield maintains a free telephone health library by which the public can receive taped messages dealing with health matters.

Though not all of these services and organizations comprise networks, they often encompass either a formal or informal channel of communication, or informational umbrella designed to share information and to minimize duplication of effort. Networking applies to those instances in which the Federal Government filters resources to local government agencies and organizations in an attempt to make citizens better informed consumers. Those outside the library field often label their activities as networking though they often use the term in a different context than librarians do. Networking is sometimes, but not always, dependent on such factors as contracted agreements, computerization, and resource sharing - factors commonly associated with library networks.

A general observation is in order. Clearinghouses and networks, such as the Consumer Education Resource Network (CERN), provide services and information similar to those offered by libraries. They maintain resource files, engage in referral activities, and compile bibliographies and other reference aids. Given the impact that CERN has had in the field during its relatively short existence, and the fact that citizens, on the whole, infrequently turn to libraries when they need information, it seems clear that clearinghouses and other non-library networks are more heavily used than are libraries. The testing of this hypothesis is beyond the scope of the present contracted study; however, this topic merits further investigation.

NETWORK TYPES

On the basis of the literature search, the research team was able to produce a typology of consumer related services, which was subsequently inspected by experts in the consumer field, including Mr. Joseph McDonough of the Advisory Group. Non-library networks can be loosely categorized by types; these types do not necessarily comprise distinct categories. In some cases, individual networks are linked to more than one type. Further, networks may be established on an informal basis; formalization may come later. Nonetheless, the following network typology seems appropriate:

1) Coalition

Coalitions minimize duplication of effort, foster cooperation, and continue to add members so that they can speak with greater force on certain matters. Often an individual network or an interest group (e.g., American Association of Retired People) may be a member of several different coalitions. Coalitions most often exist at the grass roots level. Still, examples can be found on a state, regional, and national basis. Examples of coalitions include Massachusetts Public Interest Research Group, Massachusetts Fair Share, Acorn, and the Massachusetts Consumer Coalition. Other coalitions may comprise interest groups and focus on such subjects as education, welfare, prisoner and women's rights, and health matters.

The Massachusetts Consumer Coalition is made up of state, local, private and non-profit agencies meeting to focus on legislation. They share information (a means for current awareness) and engage in advocacy. Massachusetts Fair Share (MFS), which focuses on community organizing, enables homeowners, renters, consumers, taxpayers and people on limited or fixed incomes to have a greater say in the economic decisions that effect their lives. MFS, which became a statewide organization in 1975, has grown to over 40,000 family and individual members. Backed by a professional research, legal, and organizing staff, its members work on such matters as energy costs, and utility rates and regulations. Members also testify at government hearings and work on community issues such as improved public transportation and added police protection.

2) Clearinghouses

These collect and disseminate information and resources, and are often government supported. They provide a means for people to keep up-to-date in the field and to monitor new developments. Clearinghouses exist in such fields as public health and nutrition. Perhaps the Consumer Education Resource Network (CERN) is the most important one in the general field of consumer issues. Apparently consumer organizations rely heavily upon this network. In addition, they might also contact the National Association of Consumer Agency Administrators and/or universities active in the field.

3) Agencies

Largely governmental, they educate consumer and other groups about specific issues. They might supply information and publicize the substance and intent of legislation. The Boston Consumer Council (directed by a member of the Advisory Board) is one of the agency networks. It is also affiliated with various coalition networks and can tap into clearinghouses when necessary. Other examples of agency networks include Area Agency on Aging (AAA), which focuses on health issues, and Legal Services, which is government funded and involves legal cases.

Local, State, and Federal government may operate citizen information lines and information centers. These centers provide information and referral on consumer issues, but they address a variety of other issues as well. In the case of Massachusetts, both the Office of the Secretary of the State and the U.S. General Services Administration maintain information centers. Given their political basis and the present funding climate, this type of network will not be investigated by the research team.

4) County Extension Service

Under the land grant program, State universities operate county extension services. The network structure consists of the U.S. Department of Agriculture and, within each State, the State university and county extension service. More important in rural than in urban areas, the service promotes consumer education, but largely from the vantage point of home economics. The county extension service, as well, supports the 4-H program and disseminates Federal information to the general public.

5) Better Business Bureau

Funded by businesses, the Bureau does consumer education and is perhaps most successful in those cases in which there is no alternative resolution of consumer complaints. It rarely takes strong positions in situations involving advocacy, and is consequently most effective in areas not demanding an advocacy role. When there is a complaint, the Bureau sends a letter to business in question. In general, businesses in rural areas are very concerned about word-of-mouth advertising and their own reputation. They will respond to the letter and will often resolve the matter.

It might be noted that local consumer groups and the Bureau have their own communication channels. They might not even be in communication with each other.

6) United Way of America

This is an umbrella group for many social service agencies, some of which provide consumer information. Through the distribution of money, the United Way of America tries to minimize the duplication of efforts among the agencies and to encourage a better sharing of resources among them. The United Way, for example, funds the Boy's Club of Boston, which maintains a consumer education program.

The United Way of America produces sources intended to strengthen the quality of information and referral across the nation. For example, Challenge to United Way Information and Referral (1978) discusses the issues, definitions, basic program elements, types of information and referral organizations, and the network concept. It also provides examples of information and referral services.

BOSTON CONSUMER'S COUNCIL, A SAMPLE NON-LIBRARY NETWORK

Highlighting the Boston Consumer's Council is done for two reasons. It is involved in at least two networks (coalition and government agency) and embodies elements essential for the construction and testing of the Interview Guide, for both library and non-library networks. Two of these elements are publicity and criteria of success. Figure 3.2 reproduces the complaint record that Council staff complete in every interview. It shows that the Council tries to determine how consumers became aware of its services and to monitor the entire complaint process making a determination as to the actual amount of money saved.

Criteria for success look at the practical effect in the marketplace and are less concerned with abstractions. Basically, the criteria may be characterized as long-range (providing consumers with knowledge necessary for avoiding the situation in the future) and short-range (consumers getting their money refunded). In either case, people are informed as to their basic rights. The central question for the short-range goal is whether the money saved can be accurately measured? Council staff members talk to consumers and mediate with businesses and agencies. By bringing both sides together, they obtain the yardstick for measurement.

Another criteria is the willingness of people to return to the Council when another consumer problem arises in the future. Agencies such as the Consumer Product and Safety Commission, which focusses on the health and safety of the general public, try to ban unsafe products from the marketplace. Criteria become the degree of the Commission's success and the time frame in which decisions are rendered, and products recalled.

A variety of techniques are used to promote the Council's services, including newspaper articles, seminars, public service announcements on radio and television, word-of-mouth, and referrals from other agencies and community action programs. Car cards, which were placed on local public transportation, notified riders about the handling of consumer complaints; the Council must rely on free publicity but receive a discount on the cards. Of these techniques, newspaper articles which discuss problems and encourage people to contact the Council for assistance generate the most consumer complaints. The reputation and past

Figure 3.2.

boston consumers' council

complaint record

DATE FILED___/___/___

INTERVIEWER____________

$$ SAVED leave blank

CONSUMER

NAME____________ ____________

ADDRESS________________________

CITY________________ZIP______

TEL: DAYS____________OTHER__________

HEARD ABOUT BCC____________________

RESPONDENT

BUSINESS________________________

CONTACT________________________

ADDRESS________________________

CITY________________ZIP______

TEL:________________________

COMPLAINT:

1. What business is involved? where located?
2. What item was purchased? or what service was contracted? Be specific; get brand names, account numbers, car models, etc.
3. When did the transaction take place?
4. How much money was involved? how paid? credit involved?
5. What is the problem involved?
6. With whom has the consumer spoken?
7. What does the consumer want done to resolve problem?

☐VIOLATION OF 93A
☐AUTO CHECKLIST ATTACHED
☐SMALL CLAIMS BOOK SENT

RESPONSE:

1. Speak to the appropriate person--servic manager, owner, etc. Get his/her name Get the date.
2. Ask if they are familiar with the persc and the problem.
3. Are they aware of laws governing the transaction? Inform them.
4. Suggest a means of settling the probler or ask what they see as a solution -- be prepared to present some options.
5. Record the respondent's offer of resolı accurately and fully -- what they will do and when.

WARNING LETTER SENT ON____________
EXPECT RESPONSE ON______________

DATE OF TRANSACTION__________COST_______CONSUMER WANTS________________

WHAT HAS CONSUMER DONE TO RESOLVE________________________

COMPLAINT RESOLVED BY BCC-------- AS FOLLOWS: DISPUTE SETTLED ☐ REF.TO SM.CLAIMS

CONSUMER SATISFIED: YES__________NO________ REFUND RECEIVED ☐ SEE ABOVE

IF NO, REASON: COMPLAINT W/DRAWN ☐ SEE ATTACHED

REFERRED TO OTHER AGENCY______________

DATE COMPLETED_____/______/______

successes of the Council in the resolution of consumer complaints aid publicity efforts. Unlike libraries, it does not see its function ending once people receive the necessary information. Council staff members will interpret information and be involved in the entire mediation process. By monitoring the publicity campaign, the Council can determine which techniques are most successful and can suggest topics to newspapers which might interest their readership.

Founded in 1968 by Mayor Kevin H. White, the city of Boston Consumers' Council is responsible for a broad range of consumer protection activities. It conducts studies and investigations on matters pertaining to consumer interests, sponsors educational programs for informing consumers (e.g., seminar programs, a weekly, twenty-four hour recording of consumer tips, best buys, and warnings), and ensures enforcement of consumer legislation (e.g., responds to consumer complaints and when necessary assists complainants in small claims litigation). The Council advises consumers of their rights and their options; it may also attempt to negotiate settlements between the business community and consumers.

> "The first step in the mediation process involves a careful hearing of the consumer's claim, followed by the mediator's efforts to ascertain the apparent validity of that claim, and whether or not the consumer has done everything in his/her power to settle the problem. Advice on the self-help approach to consumer complaints resolution is considered an important educational function performed by the mediator. It is hoped that the consumer thus guided through the steps of settling his/her own problem will become a more knowledgeable consumer and one less susceptible to future abuse."
>
> "If it is ascertained that all options of self-help have been exhausted, and that referral to any other agency is not a satisfactory solution, the complaints mediator will begin case work (intervention) on behalf of the consumer." (4)

The Council handles over 30,000 consumer complaints every year.

Table 3.5 depicts the consumer complaints received during calendar year 1980. The data are based on quarterly statistical averaging of fifteen staff investigators' weekly caseload reports. The table provides a breakdown of the figures for the sampling period from October 1, 1980 through December 31, 1980,

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[4] Paul D. Berg, Complaints Manager, (Boston, Massachusetts) Mayor's Office of Consumer Affairs and Licensing, "Mayor White toughens consumer protection in city -- saves money in wake of Proposition 2-1/2." (mimeographed sheet) December 8, 1980, p. 2.

Table 3.5. Breakdown of Consumer Complaints for 1980

4TH. QUARTER STATISTICS	
HOME IMPROVEMENT	985
AUTO REPAIRS	1,803
AUTO SALES (new/used)	1,187
CLOTHING & SHOES	234
DEBT COLLECTION/CREDIT	302
DEFECTIVE MERCHANDISE	442
DRY CLEANERS/LAUNDRIES	197
FALSE ADVERTISING	270
FURNITURE, FLOORCOVERING, DECOR	662
APPLIANCES (service/sales)	599
INSURANCE	258
MEDICAL	129
PUBLIC UTIL: Electric 203 Gas Telephone 165 total	291 659
RADIO/TV (service/sales)	493
REFUNDS, RETURNS, CANCELLATION POLICY	630
RENTAL HOUSING (Landlord-Tenant)	2,271
SUPERMARKETS/GROCERIES	261
TRANSPORTATION	243
MISCELLANEOUS (List)	2,192
TOTAL CASELOAD FIGURE(¼ly)	13,829

ANNUAL PERCENTAGES	
HOME IMPROVEMENT	7.12%
AUTO REPAIRS	13.04%
AUTO SALES (new/used)	8.59%
CLOTHING & SHOES	1.69%
DEBT COLLECTION/CREDIT	2.19%
DEFECTIVE MERCHANDISE	3.20%
DRY CLEANERS/LAUNDRIES	1.43%
FALSE ADVERTISING	1.95%
FURNITURE, FLOORCOVERING, DECOR	4.79%
APPLIANCES (service/sales)	4.33%
INSURANCE	1.87%
MEDICAL	.94%
PUBLIC UTIL TOTAL	4.76%
RADIO/TV (service/sales)	3.60%
REFUNDS, RETURNS, CANCELLATION POLICY	4.56%
RENTAL HOUSING (Landlord-Tenant)	16.42%
SUPERMARKETS/GROCERIES	1.89%
TRANSPORTATION	1.76%
MISCELLANEOUS (List)	15.85%

as well as the annual percentages. As the table indicates, the two most important categories of consumer complaints are rental housing and auto repairs.

On October 29, 1980, Mayor White established The Mayor's Office of Consumer Affairs and Licensing, which combined the Boston Consumers' Council with the 238 licensing and registration and permit functions maintained by numerous city departments. The purpose was to

> "maximize the efficiency and economy of these functions and, at the same time, assure that all city licenses adhere to the laws and regulations which exist to protect the consuming public in the marketplace. Furthermore, the consolidation of functions coupled with a long overdue restructuring of the permit fee structure are expected to reap substantial budget savings by eliminating duplication of effort, and increased revenues by increasing license and permit

fees to a level related to the actual cost of issuance, inspection, and monitoring." (5)

CONCLUSION

Survey respondents were asked if they were aware of any other networks, library or non-library, providing information to help people with everyday problems. It is encouraging to note that the non-library networks mentioned fit into our typology and that only a few library networks (24) were even suggested. Some 10, or 41.8 percent, of these are from the North Central division whereas another 6, or 25 percent, are located in the Northeast. Four belong in the West; all of these are located in California. The remaining four were scattered among the states comprising the South. New York, California, and Minnesota alone accounted for 11, or 45.8 percent, of the networks suggested. This pattern is similar to that found in the library survey. The largest number of networks fall into the North Central division, with New York accounting for the bulk of these.

SELECTION OF THE NINE NETWORKS FOR CASE STUDY PRESENTATIONS

The initial survey of library networks and the categorization of non-library networks have been completed; information on the current state of the art of the library networks for the provision of consumer information has been gathered and reported in the preceding section. The nine information networks, discussed in the following section, have, as a result, been specified for more in-depth investigation in order to appraise the effectiveness of the library and non-library information networks in providing consumer information.

With the advice of the Advisory Group, it was decided that five library networks and four non-library networks should be selected. The five library networks were selected from among ones listed in the _Directory for Library Networks and Cooperative Library Organizations._ All these networks provided interesting comments during the course of the telephone survey of library networks. Other criteria for selection included coverage of the network in the existing literature, researchers' or Advisory Group's awareness of that network, the geographical spread of the network, or the initiation of a potentially useful program or service. The four non-library networks were selected to represent the network typology with further consideration given to factors such as the coverage of the network in the existing literature, Advisory Group's awareness of that network, and the travel convenience for the researchers. Mr. Joseph McDonough of the Advisory Group provided extensive guidance in the development of the typology of non-library networks and the selection of the four networks.

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[5] _Ibid._, p. 1.

LIBRARY NETWORKS SELECTED

Community Health Information Network (CHIN), Cambridge, MA

This network is noted in the literature review section of Chapter 1. It represents a cooperative effort between a hospital and six public libraries in the field of consumer health information. Although Project CHIPS, which was previously discussed in Chapter 1, was the first such type of information network initiated in the consumer health information field, Project CHIN is larger in scope and closer in proximity to the research team. One of the network public libraries, the Watertown Free Public Library was also selected for an interview.

The Nassau Library System, Uniondale, New York

This network represents one of several networks in the State of New York, and offers career counseling whereby counselors meet people in the library on an appointment basis.

OCLC/CHANNEL 2000, Columbus, Ohio

In addition to its noted bibliographic network, OCLC, as noted in the literature review section of Chapter 1, has become increasingly active in efforts to enable people to tap electronic information from their homes. CHANNEL 2000 is a noted experimental home delivery project, utilizing new technology. In addition to CHANNEL 2000, the Public Library of Columbus and Franklin County was also selected for interview due to its active participation in the library catalog component of CHANNEL 2000.

The Free Library of Philadelphia, Philadelphia, PA

This Library is listed in the Directory of Library Networks and Cooperative Library Organizations as a network. The library system has been actively involved in consumer information for a number of years. It offers some of the same programs as those of the Nassau Library System, but lacks the staff and resources to pursue them as forcibly. The researchers and members of the Advisory Group wanted to include this library system for its contrast to the Nassau Library System.

The Regional Energy/Environment Center, Denver, Public Library, Denver, CO

This network is also described in the literature review section of Chapter 1. It represents a cooperative program between a public library and government agencies.

NON-LIBRARY NETWORKS SELECTED

Each of the following four networks was selected to represent one specific type of consumer information network, as discussed earlier under the non-library network typology:

The Better Business Bureau of Western Massachusetts, Springfield, MA

This was selected because it serves rural and suburban, as well as metropolitan areas.

Consumer Education Resource Network (CERN), Rosslyn, VA

This clearinghouse was selected due to its prominence in the field of consumer information. CERN also provides "library-like" services, such as the compilation and distribution of bibliographies, and online data base searching.

The Massachusetts Executive Office of Consumer Affairs, Boston, MA

This Office was selected because of its role as part of a coalition network. It engages in problem solving and consumer education. Representing the "agency" type of network, it also maintains a telephone service for the answering of reference questions.

The Middlesex County Extension Service, Concord, MA

This a county extension service, which functions in both urban and rural settings; thus, the inclusion of this Service should enable us to examine its operation in both modes.

Once the nine networks had been selected, the researchers developed an "Interview Guide" to elicit information relating to the organizational structure of the network, the goals of the consumer information service, the nature of the service, its relationship to other networks, fund allocation, the number and background of staff members, policy priorities, publicity of consumer services, the types of information sources used in developing consumer services, a comparison of five criteria common to information sources, information transfer and new technology, users of the network, user satisfaction and methods of evaluation and the role of libraries in providing consumer information services. It also includes a request from each network for relevant supporting documentation. The Interview Guide was pretested on members of the Advisory Group and modified as necessary. This effort resulted in an Interview Guide as included in Appendix I. This Interview Guide was used as the survey instrument during each network interview. Part II of this Final Report include the detailed results of each interview. In the case of the Regional Energy/Environment Center, the researchers conducted a follow-up interview four months after completing the original interview. Further, they met with the director of a state agency with whom the Center had a contract. In addition to interviewing a staff member the network headquarters of Project CHIN, the research team also met with staff from one of the member libraries. The interview in Columbus, Ohio, was held with a project staff of CHANNEL 2000 at OCLC and the

Director of the Public Library of Columbus and Franklin Country. With these exceptions, interviews were limited to members of the network headquarters.

Chapter 2 has already discussed the draft assessment model stipulated in the Federal Government contract. It has shown those elements that networks will want to address when developing and refining their consumer information services.

Chapter 4, then examines similarities and dissimilarities among the nine networks interviewed; while Part II of this Final Report presents the results of each interview and therefore supplements the Chapter. In this respect, Chapter 4 pulls together the information gathered from all the interviews, alerts readers as to factors to take into consideration if they want to develop consumer services. It also reinforces the view of the librarians interviewed that public libraries should pursue consumer services actively and aggressively. The initiation of such services enables libraries to integrate themselves effectively into the community. Residents, therefore, begin to associate libraries with a variety of information needs. Further, the library is perceived as an important information provider -- one which serves as a mediator among other institutional providers. Other providers, as well, realize that libraries have a crucial role to play in the organization, acquisition, and dissemination of information.

LIMITATIONS OF THE STUDY RELATED TO THE SELECTION OF THE NINE NETWORKS

The researchers were limited to the selection of nine networks, each of which represented a different type of network, and, therefore, had to resort to individual case studies which did not permit a precise determination of effectiveness or statistical comparisons. As a result, individual networks cannot use the data collected in order to compare their situation to that of similar networks. However, they can identify factors that have made some networks either successful or unsuccessful in providing consumer information. It is possible, however, for us to call attention to the provision of consumer information, to identify some major networks providing such information services, and possibly to encourage other networks and various funding sources to become involved.

On the whole, the researchers selected from among the more visible and active networks. These may or may not be typical of the entire spectrum of networks engaged in meeting the information needs of consumers. In spite of the existence of the Directory for Library Networks and Cooperative Library Organizations which served as the basis for the telephone interviewing, it can be questioned in retrospect if all those listed are indeed "networks" as defined by the researchers of this project. For example, the inclusion of the Free Library of Philadelphia is questionable since it comprises a library system; at the time that it was selected as one of the nine on-site networks, the researchers and members of the Advisory Group believed that it was a network (after all, it was included in the Directory.) Further, it seemed to offer specific programs that were innovative and responsive to the needs of the general public. Only the actual on-site interview aired the question of appropriateness for inclusion in this study. Nevertheless, inclusion of this library underscores the problems in identifying the range of networks providing consumer services.

SUMMARY

This Chapter reports the results of the survey of the existing 620 library networks concerning the provision of consumer information services. It also categories the non-library consumer information networks. With this essential information, this Chapter presents the rationale for the selection of the five networks from among those in the library field, and the four from among those outside this particular field. Suffice it to say here, the nine were selected for one or more of the following reasons:

- coverage in the literature
- specific programs mentioned during the course of the telephone network survey
- known to one or more of the researchers and the members of the Advisory Group
- fit into the typology of non-library networks
- geographical location of the network
- offered unique characteristics to identify test factors for the assessment model.

The nine networks selected represent different types, involvements with consumer information, and degrees of sophistication. These networks are as follows:

LIBRARY NETWORKS

- Community Health Information Network (CHIN) & the Watertown Free Public Library
- The Nassau Library System
- OCLC/CHANNEL 2000 & the Public Library of Columbus and Franklin County
- The Free Library of Philadelphia
- The Regional Energy/Environment Center, Denver Public Library

NON-LIBRARY NETWORKS

- Better Business Bureau of Western Massachusetts
- Consumer Education Resource Network (CERN)
- Massachusetts Executive Office of Consumer Affairs
- Middlesex County Extension Service

CHAPTER 4

COMPARATIVE FINDINGS FROM THE NINE NETWORKS SELECTED

The purpose of this chapter is to compare findings among the nine networks interviewed and to identify criteria of effectiveness necessary for refining a model. The points of similarity, however, may be of value to library networks wanting to expand their role as providers of consumer information. Although an examination of nine case studies does not lend itself to statistical analysis, the investigators can note trends and reiterate the belief of survey respondents that more public libraries might be able to attack some of the problems relating to financial retrenchment that they are now facing, if they will initiate programs such as those described in the previous chapter; these programs, however, may not require networking. For example, the Plainedge Public Library, which is a member of the Nassau Library System, is situated in a blue collar area, similar to those, described in library literature as often unsupportive of library programs. Yet, through its programming, this public library has the support of its community and is meeting the informational and "survival" needs of community residents. The library alerts community residents about consumer information through its newsletter and has initiated an unemployment service, in which a newsletter of job seekers is compiled and circulated to over 2,400 employers.

FUNDING

Federal support provided the impetus by which the Denver Public Library, Project CHIN, the Nassau Library System, the Philadelphia Free Library, and CERN initiated special programming relating to consumer services. The Massachusetts Executive Office of Consumer Affairs as well as the Middlesex County Extension Service received government funding. Only CHANNEL 2000 and the Better Business Bureau did not receive similar funding; however, the Bureau could draw upon the national association and contributions from the business community. CHANNEL 2000 operated by OCLC stands in sharp contrast. This experimental project was developed to test the technological feasibility of developing a viewdata system for the delivery of information, much of which would be characterized as consumer information. The project was mainly supported by OCLC, with approximately one-fifth of the $500,000 coming from the Bank One of Columbus, Ohio. Bank One was interested in demonstrating banking services in the home by using viewtex technology.

Government seed money helped certain networks start their consumer services. The withdrawal of government monies has forced these networks to seek alternative funding. If such funding is not forthcoming, some consumer services might be forced out of existence, in spite of the fact that they are meeting information needs and have developed specific clientele. The Denver Public Library's Regional Energy/Environment Center and CERN, for example, are having to cut back on staff and services. The budget of the Massachusetts Executive Office of Consumer Affairs, which was never large, has been cut. Staff members are trying to carry out the present level of programming, while seeking to expand the Office's cooperative relationship with other information providers.

The consumers services of the Philadelphia Free Library illustrate what can happen when outside support is not forthcoming. The library faced with severe budget cuts has had to release a large number of professional and support staff. The consumer services now operate by their own momentum and respond, to a large extent, to the needs of the various branch libraries. In this regard, the approach to consumer information provision is limited; and it is neither active, nor aggressive. The library merely tries to update reading lists and bibliographies that pertain to significant community needs. Even if outside support were forthcoming, the library would probably use the newly acquired money to rehire staff, to reduce the work load on the present staff, and to maintain essential services.

With the present financial situation, some networks are trying to "institutionalize" consumer programs so that they will not be terminated or regarded as "frills." The Nassau Library System, for example, does not anticipate the initiation of new programs. Rather, it wants to get existing, experimental programs that have proven themselves to be regarded by member libraries as required programs, ones not dependent upon "soft" money. In the case of Project CHIN this has happened. Member libraries, even those facing severe financial limitations, want to continue as part of the network and to do their fair share. One criterion for effectiveness therefore becomes the network's ability to gain the support of member libraries and to articulate goals and objectives acceptable to all member institutions.

A key finding of this study is that libraries may not regard the provision of consumer services as a high priority. Further support for this conclusion can be gained from the fact that only 22.1 percent (128) of the 578 library networks surveyed in Chapter 3 currently provide consumer information services. It would seem therefore that consumer services are often regarded as "frills" and have not been effectively institionalized. Other services are regarded as more central to the goals and objectives of individual library networks. Still, library networks have often not reached out to non-library networks in an effort to develop their reference and referral services. Staff members of CERN, for example, lamented the fact that the library community, even when aware of CERN and its services, did not engage in referral.

GOALS AND OBJECTIVES

At the time that the networks decided to become involved in the provision of consumer information, they formulated goals and objectives. (1) The formulation of these goals and objectives, however, might have resulted from a desire to seek Federal funding. With the withdrawal of outside funding, the precise goals might then become clouded. Still, staff members had identified the directions that they wanted to pursue.

Table 4.1 summarizes the extent to which network goals have been articulated to its members as well as the intended target audience. The figure reflects some variation. The Free Library of Philadelphia, for example, is dealing with libraries within the system, while CERN, on the other hand, operates on the national level and aims at seven broad target groups.

As one would expect, there is substantial variation among the target groups as to their awareness of the network and its goals. Further, when a network provides either direct or indirect services to end users, these users may be unaware that network resources had been used. They may also be more aware of some services, primarily those dealing with information dissemination. Awareness, therefore, must take into account the visibility of the service and the receptivity of user groups to avail themselves of the services offered. The Regional Energy/Environment Center, for example, finds that government officials are aware of its services, but are often unwilling to make referrals. Staff members from the Middlesex County Extension Service noted that the achievement of specific goals might depend on availability of adequate staff and financial support. Further, they questioned how much can be accomplished, when they must compete with other information providers, ones offering at times more specialized services. As one staff member questioned, "are we trying to accomplish too much?" It might also be noted that responses to questions about goals and objectives were based more on personal opinion rather than on evaluation.

ACTIVITIES

Staff members interviewed were all enthusiastic about their network, its goals and programs. They believed that their network was innovative and a leader in the field. With the present budgetary situation, they were searching for alternative sources of funding. The Regional Energy/Environment Center and Project CHIN, for example, were turning toward the private sector for support. The Denver Public Library is considering the establishment of a fee based information service aimed at businesses and organizations.

Staff members view themselves as dedicated and as activists, serving under administrators who have been supportive to different degrees. Table 4.2 shows the activities which the staffs believe are essential to their operation. Two

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[1] Specific goals and objectives are described in the individual network interview reports in Part II.

Table 4.1. Articulation & Effectiveness of Network Goals*

Network	Members of network aware of goals	Extent to which end users of networ were aware of goals	Goals provide a workable framework for daily operation of network	Network developed plans to meet goals
Community Health Information Network (CHIN)	2	4	2	1
- Watertown Free Public Library	1	1	1	1
The Free Library of Philadelphia	1	3	2	1
The Nassau Library System	3	4	3	2
OCLC/CHANNEL 2000	1	1	1	1
- The Public Library of Columbus & Franklin County (PLCFC)	1	1	2	-
The Regional Energy/Environment Center, Denver Public Library	4	3	3	4
Better Business Bureau of Western Massachusetts	1	3	2	2
Consumer Education Resource Network (CERN)	3	5	2	1
Massachusetts Executive Office of Consumer Affairs	-	1	2	2
Middlesex County Extension Service	3	3	3	3

*This table summarizes the responses of those interviewed to questions from the Interview Guide concerning network goals. They were responding to a five-point scale, with "1" as the most important and "5" as the least important.

Table 4.2. The Importance of Various Activities to Specific Networks*

Network Name	Information Acquisition & Organization	Information Dissemination	Information Referral	Document Delivery	Information Interpretation & Adice	Consumer Education	Advocacy	Lobbying	Problem-Solving
Community Health Information Network (CHIN)	1	1	1	2	4	2	1	2	3
- Watertown Free Public Library	1	1	1	2	4	3	5	3	5
The Free Library of Philadelphia	1	1	1	1	5	1	5	5	5
The Nassau Library System	1	1	1	1	1	1	3	3	1
OCLC/CHANNEL 2000	1	1	1	1	1	1	5	5	1
- The Public Library of Columbus & Franklin County (PLCFC)	1	1	1	1	4	3	4	5	5
The Regional Energy/Environment Center, Denver Public Library	1	1	1	2	5	3	5	1	2
- State Energy Extension Service	4	1	4	1	1	2	5	4	1
Better Business Bureau of Western Massachusetts	-	1	1	-	-	2	-	-	1
Consumer Education Resource Network (CERN)	1	1	1	1	4	2	5	5	5
Massachusetts Executive Office of Consumer Affairs	1	1	1	1	5	1	1	1	1
Middlesex County Extension Service	1	1	1	1	1	1	5	2	1

*Survey respondents were asked to rate each activities on a five-point scale, with "1" as the most important one, and "5" as the least important.

networks view lobbying as a major activity. Lobbying can call attention to the financial plight faced by libraries while at the same time demonstrating that they deserve greater financial support. After all, it is reasoned that libraries provide information and services which should be regarded essential to the survival and development of a community.

Other networks did not view lobbying as such an important consideration. They questioned whether lobbying was a legitimate activity when it was directed toward projects which were dependent upon Federal funding. Seeing a potential conflict of interest, they preferred to demonstrate the value of their services through other means. Lobbying, as was noted, can be interpreted in different ways. To some people, the word has a negative connotation. In the case of the State government officials interviewed, they preferred to see their actions in terms of fostering the public good and of directly making an impact on the legal rights of consumers.

Networks such as the Massachusetts Executive Office of Consumer Affairs and the Better Business Bureau of Western Massachusetts provide services not offered by the other networks examined. They may serve as mediators and encourage arbitration. In the case of the Executive Office, it can prepare legislation and bring to bear the powers of State government. It can also provide referral to regulatory agencies and the office of the State attorney general. The Middlesex County Extension Service provides personalized, individualized service. Budget limitations restrict the ability of staff members to visit farms, observe problems, and make recommendations. For the type of services provided, travel is an essential component. Without it, the target audience may become less dependent on the services and search out an alternative provider.

In the case of five networks (CERN, the Free Library of Philadelphia, the Massachusetts Office of Consumer Affairs, the Middlesex County Extension Service, and the Regional Energy/Environment Center of the Denver Public Library), there are numerous staffing changes. The networks are attempting to maintain essential services with personnel changes and, in some cases, the shifting of staff. Staff reductions, however, are affecting morale and the ability of networks to achieve stated goals and objectives in the short term. If the necessary funds are attracted, changes can be attempted and service priorities reestablished. Perhaps, the Free Library of Philadelphia represents the only exception. Any additional funding would be used to maintain existing services and to expand hours of services.

USER GROUPS

The networks had identified their target audiences and have developed services to meet the information needs of these groups. Yet, users may be frequently unaware that they are consulting a network. Most often, they consult a single library or agency without realizing that this information provider can supplement its resources by consulting a network or networks. The referral process may even be equated with consulting the personnel of another information provider but not the formal resources of that provider; in other words, the emphasis is on interpersonal communication and not on printed resources. Complicating matters is the fact that some networks exist solely or largely to serve libraries (e.g., the Philadelphia Free Library or the Nassau Library System) and that consumers may have little or no contact with the network. In other cases (e.g., the Regional Energy/Environment Center of the Denver Public Library), the network deals directly with consumers. CERN, however, accepts requests from consumer educators but not consumers themselves. Such individuals might be referred to their local public library. In the case of the Watertown Public Library (Project CHIN) and the Nassau Library System, the staff worked closely with the community and other information providers. Librarians frequently served on local committees, identified information needs that the library would meet, and encouraged community residents to associate the library with their needs. Developing similar working relationships is essential as public libraries expand their services and become an integral part of the community. However, the dialogue may not focus on the network; instead, it might focus on a particular member library.

DEFINITION OF CONSUMER INFORMATION

As noted in Chapter 1, the literature defines consumer information in various ways; so too did the networks interviewed. The definitions reflect the mission of the network and its target audiences. The Nassau Library System and the Free Library of Philadelphia, for example, equate consumer information with community service programs, while CERN regards it as consumer education -- "education about what the marketplace is, how to function in it, and how to affect change in the marketplace." CHIN views consumer information in a specialized context; it becomes the provision of health and disease information. The variety of definitions in use complicates comparative analyses. Nonetheless, it illustrates that consumer information can be viewed within a general or more specialized context.

The differences in definition should be taken into account when trying to determine the number of networks engaged in the provision of consumer information. The various definitions should also be taken into consideration when developing suitable evaluation criteria. Attempts to examine and compare various aspects of the topic of consumer information will have to categorize and compare the various definitions.

AVAILABLE RESOURCES

The networks engage in reference services that require more than access to printed sources. They may develop resource files and contacts with other information providers, be they interpersonal, mass media, or institutional. In the case of the Better

Business Bureau of Western Massachusetts, it can tap community resources and the Council. The Massachusetts Executive Office of Consumer Affairs has developed a working relationship with the mass media, consumers, and various organizations and groups.

Even though networks such as the CERN and the Middlesex County Extension Service have printed sources available, they encourage interpersonal communication. They realize that people prefer the interaction and personalized service. It was questioned whether networks which are more formal and less personal may be less effective in dealing with the public. When it comes to information sources themselves (see Table 43), the accuracy and understandability of the answer, as well as the up-to-dateness of the information, are all important. The amount of time it took is less important, if it is viewed in terms of the time it took network staff to find the information. However, if viewed in the context of the time it took consumers to get the right answer, then time becomes much more important. Cost in terms of money is important when it is the consumer's money that is considered. It is less important when one considers the network's money. The networks themselves have to be careful about their expenditures. As is evident, the five criteria can be viewed from different vantage points.

For CHANNEL 2000, a technological project, the most important factor was the "reliability of the system," followed by the "ease of use of the system." All five of the factors probed in the Figure were considered to be of equal importance, but they ranked behind the other two.

The Energy Extension Service maintains a contract with the Regional Energy/Environment Center in order to reduce the bulk of information received and examined; minimize the duplicated, trivial, and superseded information that is received; have access to current and accurate information; receive information fully annotated as to contents, value and audience; and disseminate information to field offices in a timely manner. The success of this contract suggests a service that libraries can perform as long as the necessary funds are available.

Access to a WATS or FTS line enhances reference service and the ability of network staff to engage in referral. Withdrawal of such a service will have an impact on the network and staff members' perceived ability to meet the information needs of their clientele. Undoubtedly consumers representing their own personal interests, rather than those of the groups for which they work (e.g., government agencies, business, or organizations), are more likely to avail themselves of toll-free telephone numbers and to prefer that network staff make long distance telephone calls on their behalf. Another advantage of consumer services provided by CERN, the Middlesex County Extension Service, etc., is that the services are normally free. Exceptions to this would be the charge for online searching and soil tests. CERN staff also verify the accuracy and up-to-dateness of information before they distribute it. This ensures that the information received by

Table 4.3. The Importance of the Five Factors to Individual Networks*

Network Name	Up-to-dateness of Information	Accuracy of Answer	Understandability of Answer	The Time It Took	Cost in Money
Community Health Information Network (CHIN)	2	2	1	5	5
- Watertown Free Public Library	2	1	2	4	5
The Free Library of Philadelphia	1	1	1	1	1
The Nassau Library System	1	1	1	1	1
OCLC/CHANNEL 2000	3	3	3	3	3
- The Public Library of Columbus & Franklin County (PLCFC)	1	1	1	1	1
The Regional Energy/Environment Center, Denver Public Library	1	1	1	5	5
- State Energy Extension Service	1	1	2	1	5
Better Business Bureau of Western Massachusetts	1	1	1	2	2
Consumer Education Resource Network (CERN)	2	1	2	4	5
Massachusetts Executive Office of Consumer Affairs	1	1	1	1	1
Middlesex County Extension Service	1	1	1	5	5

*Those surveyed were asked to rank the factors according to their perceived importance on a five-point scale, with "1" as the most important one and "5" as the least important.

consumer educators is the latest and most appropriate.

The networks outside the library field may have a distinct advantage over libraries. They can devote themselves full-time to the provision of consumer services and to learning where to gain information. As one staff member from CERN noted, "a lifetime can be spent in learning where to go for information." Libraries, on the other hand, regard consumer services as just one area of their responsibility. In some cases, it may even be a secondary responsibility. It is evident that public libraries must decide the importance of consumer services to their mission, goals and objectives. If they cannot play as large a role as they might like, they need to identify other pertinent information providers and develop a cooperative relationship. This study has found that other providers are willing to cooperate, but that the first contact may have to come from libraries. Other providers may not have thought of libraries as having a potential role or as interested in cooperating. Further, both library and other networks may have misperceptions about the other -- misperceptions that should be identified and addressed.

PUBLICITY

The consumer programs are highly visible and are subject to some creative publicity. For example, staff from the Nassau Libarry System placed posters on the local railroad. The Regional Energy/Environment Center, CERN, as well as other networks studied, had initiated newsletters, which were circulated to clientele and advertised their services. CERN had also placed advertisements in national magazines.

The individual reports of library and non-library networks (see Part II of this Report) reflect the fact that a variety of publicity efforts have been undertaken. Some of the more effective efforts, however, include the initiation of newsletters, brochures and flyers, coverage in local newspapers, and word of mouth.

Networks such as CERN have identified target audiences and developed what its staff considers to be effective and efficient marketing strategies to meet the needs of these target groups. Obviously, libraries and library networks should not attempt to meet all information needs but should decide on which ones to focus. They should also develop staff expertise in referral and specialized services as well as ascertain the service potential of non-library networks. Non-library networks may have staff members with educational backgrounds which supplement that of library and information science. It might be noted that non-library networks, in contrast to some library networks, explain the background and expertise of staff members to users so that community residents realize that they are receiving "professional" assistance.

USER SATISFACTION

Not all of the networks have developed methods precisely for determining user satisfaction. If they had, it might have been as part of a government contract, or in the case of CHANNEL 2000 an experimental project. Some of the methods as that the networks used include the following:

- Identifying the number of people attending a particular program or requesting a service
- Monitoring the number of repeat users
- Seeing that member libraries or agencies want to continue the service
- Seeing that the number of reference questions received has increased over time
- Monitoring the number of referrals to the network and its service programs
- Soliciting responses to a questionnaire concerning the satisfaction of information needs
- Receiving unsolicited praise (telephone calls or letters of support)
- Preparing legislation to meet the problems identified from an analysis of questions received

The Better Business Bureau of Western Massachusetts, for example, sends a follow-up questionnaire to consumers in an attempt to determine if the complaint has been resolved and what was the outcome. Such a form might also identify the number of repeat users and attempt to determine the amount of money that the service saved the consumer. Project CHIP is an example of a network which deals with both member libraries and end users. Member libraries can see the impact of the network on their own collection development and upon the ability of staff members to handle medical related questions. The public might be unaware that they are dealing with a network. However, they can tell that their information needs have been met, and library staff can recognize the benefit of networking.

The County Extension Service, offices within State government, and local Better Business Bureaus have a formal network which they can tap if local resources prove insufficient. In the process, they can move from the provision of information to the mediation of a complaint. Library networks cannot provide the same degree of assistance. However, they can engage in referral and build a cooperative relationship with other information providers. In this regard, readers might want to review the individual network reports and the comments made by network staff members who during the course of the interview commented on the future role of libraries in the provision of consumer information.

Some of the networks staff interviewed find that they can no longer justify their services, and very existence, by basing user satisfaction solely on letters of appreciation and informal data gathering sheets. Instead, they want to show the economic impact of their services. The Middlesex County Extension Service, for example, is in competition with other county departments and agencies for funding. To become a more effective competitor, according to some of its staff, it might have to demonstrate the savings in dollars of having county residents avail themselves of services provided. As one staff member explained, "this is much better, and perhaps more effective, than simply reporting basic statistics reflecting how much everybody likes us."

Finally, even when some people go to a library or another institutional provider, they want personal contact rather than referral to printed sources. Librarians can develop skills relating to interpersonal communication and need to publicize the "personal" nature of their service. Combining this with accurate, understandable, and up-to-date information, libraries might expand their role as disseminators of information. At the same time, they can further develop their referral capability and build a cooperative relationship with other information providers. The purpose is to provide better service to existing user groups so that they become repeat users, while at the same time reaching out to potential user groups.

CONCLUSION

This chapter has provided a brief overview of the nine case studies, while Chapter 5 will examine the case studies in relation to the assessment model and the research questions listed in Chapter 2. The individual reports (see Part II) show criteria essential for a library network to consider when developing consumer programs. First, it must offer a service that is needed, not filled elsewhere, and recognized outside the library as important. The network must be part of an active institution, one willing to experiment and to recruit high quality, innovative staff members, who are committed to servicing a variety of information needs. Some of these information needs might even be met by service programs not commonly implemented by libraries (e.g., the unemployment services operated out of the Plainedge Public Library, Nassau Library System). The network might even attract government and non-government funds and fulfill contracted services such as the one the Regional Energy/Environment Center performs for State government.

Once the program has proved successful, every attempt should be made to institutionalize it and not to regard it as a luxury to be implemented only during times of prosperity. Such programs, as well, must have the support of the library administration and boards of trustees. Staff members must be aware of political consequences and be able to demonstrate the value of the programs to the community.

In addition to understanding the information needs of the community and being able to implement new programs, the library network must reach out to other institutional providers and develop a cooperative relationship.

Table 4.4 summarizes the views of those interviewed about the role of libraries in the provision of consumer information services. With the exception of the Springfield Better Business Bureau, the most important functions of libraries becomes the acquisition and organization of information, information dissemination, and information referral. Differenes of opinion emerged concerning the role of libraries in delivering needed documentation and in consumer education. Both of these were rated as important functions but not as important as the ones already discussed. The Nassau Library System rated information interpretation/advice, and problem-solving as important functions. Network staff members attempt to "help people negotiate the maze of red tape" and may interpret rules and regulations if other information providers refuse to do so and the user requires such assistance. However, "they do not advocate a person's cause."

Lobbying, which implies both a political activity and public representation, was viewed a necessary activity if public libraries expect to receive extensive community and funding support. Since libraries are in competition with other information providers for available funds, they should "sell themselves more effectively." In this regard, they might well want to consider serving as lobbyists for users (advocacy) as well as lobbyists for the library and its services.

It is interesting to note from Table 4.4 that only the Nassau Library System and CHANNEL 2000 rated information interpretation and advice, and problem-solving as most important. The Springfield Better Business Bureau rated problem-solving as a most important consideration but viewed information interpretation and advice as less important. Apparently networks active in the provision of consumer information, both those of a library and non-library nature, do not view these two factors as necessary for the development of a successful library consumer information program. Instead, libraries should develop their capacity to engage in information acquisition and organization, information dissemination, and information referral. They might also provide consumer education and document delivery.

Library networks must formulate a marketing plan to market the library and its programs as a product which has resources essential for the community in meeting specific information needs. These information needs might relate to the survival of the community and the well-being of the residents.

Once the marketing plan has been implemented, the network staff members are very conscious about the quality of service provided and the image that they are portraying. They also actively and aggressively publicize the service (e.g., through newsletters developed by the Nassau Library System and Regional Energy/Environment Center). The objective is to meet specific information needs, to encourage target audiences, to avail

Table 4.4. The Perceived Importance of Various Activities for Libraries*

Network Name	Information Acquisition & Organization	Information Dissemination	Information Referral	Document Delivery	Information Interpretation & Adice	Consumer Education	Advocacy	Lobbying	Problem-Solving
Community Health Information Network (CHIN)	1	1	1	2	4	2	1	2	3
- Watertown Free Public Library	1	1	1	2	4	3	5	3	5
The Free Library of Philadelphia	1	1	1	1	5	1	5	3	5
The Nassau Library System	1	1	1	1	1	1	3	3	1
OCLC/CHANNEL 2000	1	1	1	1	1	1	5	5	1
- The Public Library of Columbus & Franklin County (PLCFC)	1	1	1	1	4	3	4	5	5
The Regional Energy/Environment Center, Denver Public Library - State Energy Extension Service	1	1	1	2	5	2	5	2	2
Better Business Bureau of Western Massachusetts	3	1	1	3	3	1	2	4	1
Consumer Education Resource Network (CERN)	1	1	1	1	4	2	5	5	5
Massachusetts Executive Office of Consumer Affairs	1	1	1	1	5	1	5	5	5
Middlesex County Extension Service	1	1	1	1	1	1	4	3	3

*Survey respondents were asked to rate each activities on a five-point scale, with "1" as the most important one, and "5" as the least important.

themselves of the service in the future, and to publicize the network service by word-of-mouth. In this regard, CERN may be most effective. It provides library-like services (e.g., the compilation of bibliographies and the maintenance of a human resource file. Yet, members of its target audience may not think of libraries in the context of their information need).

It is the researchers' belief that a most important finding of this study may be that some library and non-library networks have been creative in their approaches to meeting information needs. They have developed innovative programs such as career counseling and job centers, and effective means of publicity, including newsletters and the placement of articles in local newspapers. The accompanying interview reports provide more detailed information about the creative approaches adopted.

Awareness of these approaches, as well as some of the service programs initiated, may be of assistance to public libraries in dealing with some of the problems they currently face. It may be that the success of networks such as Project CHIN, CERN, and the Regional Energy/Environment Center in offsetting the loss of government support will have implications for other networks. They may show the path to other funding, especially if the Denver Public Library is able to establish a fee-based information service supported by the private sector; see the Addendum to the report of this network in Part II.

CHAPTER 5

ANALYSIS OF ASSESSMENT MODEL

The previous chapter made general comparisons among the consumer information services provided by the nine networks. By examining the research questions listed in Chapter 2, this chapter more sharply focuses on the assessment model and criteria that potentially lead to the operation of successful consumer information services.

Before discussing the research questions, however, it might be beneficial to make several observations based upon the on-site interviewing. First, the consumer information services operate within a specialized context. The networks must typically select specific areas in which to develop their services. They do not attempt to be "all things to all people;" instead, they select those areas in which they believe that they can be most effective given funding, staffing, etc. Second, depending upon the scope and extent of the services provided, consumer information services can be expensive to operate. They may require Federal funding or other outside support; such support may be necessary for not only the initiation of the services but also their continuing operation. Clearly, outside funding or "soft" money has played an important role in the development of consumer information services. One criterion for success will relate to the degree to which networks can get their member libraries to absorb the costs of the services once the outside money has ceased. Both Project CHIN and the Nassau Library System have been successful in this regard. Member libraries realize the value of the consumer information services currently offered and are willing to provide financial and staff support to the best of their ability.

Further research might profitably probe the costs associated with the operation of specific consumer services. Undoubtedly the Regional Energy/Environment Center and CERN are more expensive to operate than are the consumer related services provided by the Nassau Library System and CHIN. One criterion for judging the success of a consumer related network may be related to the ability of the networks to survive once the initial funding has ceased. The viability of some networks may be evident from the efforts to seek and find other sources of funding. Apparently an overriding goal for networks dependent solely upon the provision of specialized consumer information services (e.g., the Regional Energy/Environment Center and CERN) may become self-preservation.

Third, the value of consumer information services provided in a network context can be questioned. Obviously, many of the staff members interviewed believed that the services were essential if public libraries are to meet basic information needs of their constituents. If the libraries do not provide such services, other institutional providers might. Yet, library administrations may not view consumer services with the same priority. It may be that some libraries can provide consumer services without engaging in networking. When they do resort to networking, it can be of varying degrees of sophistication, ranging from traditional interlibrary loan to the establishment of referral centers and a Regional Energy/Environment Center. Perhaps many libraries believe that they can meet most of their clients' consumer information needs without resorting to formal networking involving the application of new technology. Interestingly, most of the networks studied did not make use of new technology to meet consumer information needs, except by conducting online searches of bibliographic databases; such services often involved user fees.

Consumer information needs must be placed in the context of library goals and objectives, and therefore compete with other types of information needs, some of which may be perceived as more important. Consumer information networks clearly see the need to link consumers to the appropriate information providers and increase dialogue among information providers so that the referral process can be improved. The process of linking could be enhanced by new technology; however, those interviewed often viewed technology as theoretically beneficial. Practically, they questioned whether the necessary funds were available and whether libraries would employ technology solely for meeting consumer information needs. Instead, it was more likely that libraries would employ technology to meet a wide diversity of needs, including those pertaining to consumer information.

Libraries are installing microcomputers for public use, creating programming to cable television and storing documents on videodiscs. They are also serving as electronic information centers linking government agencies, colleges and universities, community groups and citizens. In addition, libraries are beaming signals to satellites and tracking down delinquent borrowers with electronic vigilance. As consumers begin to develop their own home information centers with cable or computers, they can query libraries and obtain information on their television screens.

Some libraries are installing coin-operated microcomputers whereby their users can select from among computer programs such as drawing up household budgets. Other libraries may use cable channels to distribute community information and may have installed computer-assisted vocational services, which describe the availability of jobs in the local area. At the Pike's Peak Library District, Colorado Springs, for example, computer terminals in branch libraries provide access to community information - course offerings of area colleges, consumer information, train schedules, day-care information, and information about local car pools. Community residents with their own microcomputers can use public telephone lines to tap into the community information network. Against this background, it might be suggested that

> "information retrieval is expected to be the top home and business use of teletext systems through the end of the century, but that transaction services such as banking and ticketing will replace information retrieval as the most popular application for two-way videotext in the home by the year 2000. Information retrieval will remain the top videotext application for the business community." (1)

As this brief discussion has indicated, public libraries are beginning to use new technology to meet public service objectives. By so doing, they are addressing the information needs of local residents. It may be that many of these libraries need not engage in networking with other libraries. However, they can develop their networking capability with other information providers and thereby better serve community information needs. The major questions then become, to what extent do libraries develop their networking capabilities, their ability to meet consumer information needs, and their capability to apply new technology?

This chapter will not fully address such issues. Instead, it focuses on the research questions identified in Chapter 2, while Chapter 6 offers additional comments about the role of new technology in the provision of consumer information services.

RESEARCH QUESTIONS

DEFINITION OF CONSUMER INFORMATION

Will the networks have articulated a clear definition?

The networks have determined which areas under the broad rubic of consumer information that they want to address. In the case of the Nassau Library System, the network staff in cooperation with member libraries have articulated the areas that would receive priority attention. Member libraries such as the Plainedge Public Library might develop services which are then marketed to the entire network.

Will the networks hold a similar definition of consumer information?

As has already been explained, the answer is in the negative; widely divergent definitions were encountered. Table 5.1, which focuses on these definitions, shows that some networks equate consumer information with community services, while others adopt more restrictive definitions - health information, consumer education, or consumer rights. The network situated in the Denver Public Library, for example, limits itself to energy/environmental information.

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[1] "NSF Study: Videotext may change your life," Library Daily July 10, 1982. p. 11.

Table 5.1. Selected Definitions of Consumer Information From Some Networks Interviewed

Network	Definition
Better Business Bureau of Western Massachusetts	Consumer information and education focuses on truth in advertising, promoting public confidence in business, and business self-regulation through voluntary cooperation. It focuses on consumer complaints and inquiries and seeks to protect the public from fraudulent and deceptive trade practices.
Consumer Education Resource Network (CERN)	Consumer education is "education about what the marketplace is, how to function in it, and how to affect change in it."
Community Health Information Network (CHIN)	Consumer information is defined in terms health information: "materials for both health care providers and consumers, in print and other formats (audio tapes, videotapes, films, etc.), which deal with maintenance, preservation, and restoration of physical, mental, or emotional well-being, including those items dealing with personal and public health, disease, medicine, therapeutics, surgery and other branches of specialized medicine."
Massachusetts Executive Office of Consumer Affairs	Consumer information is defined in terms of consumer rights, e.g., the handling of consumer complaints.
Middlesex County Extension Service	People can improve their lives if information resulting from research is made available through publications, local media, workshops, programs, or individual consultations. The focus is on consumer education.
Nassau Library System & The Free Library of Philadelphia	Consumer information is equated with community services.

TYPES OF CONSUMER INFORMATION THAT NETWORKS ARE PROVIDING

Will the networks have articulated clearly defined goals and objectives acceptable to all member institutions?

The research question was discussed in Chapter 4, under the section "Goals and Objectives." The formulation of goals and objectives, as was noted there, may have resulted from a desire to seek Federal funding. With the withdrawal of outside funding, the precise goals might have become clouded. Still, staff members had identified the directions that they wanted to pursue.

There are substantial variations among target audiences and their geographical bases - local, regional, and national. The broader the geographical dispersion the more difficult it becomes to work with the target audiences and to inform them fully of the extent and type of network services. In the case of the Consumer Education Resource Network (CERN), the target audience is most likely aware of the network's dissemination of information role. Awareness of the full range of services provided varies substantially among the seven target groups and whether training programs have been developed for a particular target group.

Member libraries may be more aware of the network than are the users. However, this should come as no surprise. Networks such as the Free Library of Philadelphia and the Nassau Library System are oriented toward serving the needs of member and branch libraries. Citizens deal with libraries rather than the network per se.

Will the networks have "institutionalized" their consumer information programs?

The answer to this question would be "to varying degree of success." Given the present funding situation, they may be consolidating programs and gaining acceptance from member libraries that have experimental programs. Those programs which could be regarded as successful should be on-going and not dependent up "soft" money. In the case of the Regional Energy/Evironment Center and CERN, the networks are fighting for their very survival. This illustrates that even those information consumer networks that are "successful" (well publicized and meet numerous information requests) are not well institutionalized. Support for their continued survival is not automatic; consumer information services may not be viewed by library administrations and funding sources as having as high a priority as some other service areas. The Project CHIN is perhaps the major exception to this generalization. Member libraries view their commitment to CHIN as solid; in spite of financial retrenchment, these libraries are attempting to maintain support for the network to the best of their ability. Nonetheless, even this network must depend, to a certain degree, upon outside funding; in this case, the funding is currently coming from the private sector.

Will the networks have implemented consumer information services on a selective basis?

As already indicated with the research questions relating to the definition of consumer information, the networks concern themselves with aspects of consumer information and not the full dimensions of this subject. Even the networks defining consumer information in terms of community service have initiated those programs with which they believe they can be most effective given their present staff, funding, and resource allocations. For example, the Community Services Department of the Free Library of Philadelphia has responsibilities beyond those consumer information services which it provides. The department is engaged in a variety of activities, including a film and speaking program. There are no plans to expand the consumer information services beyond the present level. The library must look at its commitment to these services in relationship to the present number of staff and the amount of the budget available. Still, it does not want to terminate the present services, but to meet the needs of the community and the library system the best it can.

Will the networks have developed services of great demand, which appeal to a broad audience?

As shown in Table 5.2, each network has identified the target audiences to which it wants to appeal and is working within stated goals and objectives. It should be emphasized, however, that attempts to appeal to a broad audience are conditioned by factors relating to the extent of available funding and staffing. The Massachusetts Executive Office of Consumer Affairs, for example, has a small budget and a small number of staff. Nonetheless, the staff tries to work with agencies and organization that can widely disseminate information about consumer rights. With staff cuts and the present budgetary situation, this Office may not be able to maintain its present level of services. It may have to start charging for services previously provided free and to concentrate on the most financially viable programs.

Will the networks have determined target populations and actively work with them?

The previous research questions, as well as Table 5.2, show that the networks have determined target audiences and do work with them to the extent that both staffing and financial resources permit.

AVAILABILITY OF INFORMATION SERVICES TO CONSUMERS

Will the networks limit their services only to libraries?
Will the networks' services available directly to users as well ?

The answers to these questions vary greatly. For example, the Nassau Library System and the Free Library of Philadelphia,

Table 5.2. Networks' Target Groups

Network	Target Groups
LIBRARY NETWORKS	
Community Health Information Network	The public libraries and residents of six towns in Massachusetts needing health related information
The Free Library of Philadelphia	Branch public libraries
The Nassau Library System	Member public libraries and residents in the communities
OCLC/CHANNEL 2000	200 test households in Columbus, OH
Regional Energy/ Environment Information Center, Denver Public Library	Residents of the ten-state Rocky Mountain region
NON-LIBRARY NETWORKS	
Better Business Bureau of Western Massachusetts	Consumer education and rights - protect business and consumers from unethical business practices
Consumer Education Resource Network	Consumer educators; a listing of the specific seven target groups given in the report on the network in Part II
Massachusetts Executive Office of Consumer Affairs	Consumers within the state (the agency promotes consumer education and informs businesses of their responsibilities to consumers)
Middlesex County Extension Service	Residents of the county/state. Each of the major programs targets different audiences.

as viewed in the context of this report, deal exclusively with member libraries in the system. These member libraries, in turn, deal with the users directly. Consequently, end users may be not aware that their information needs have been addressed through networking. CHANNEL 2000 involved an experimental project in which selected households had access to information; it does represent a direct interaction between users and a public library.

Project CHIN is a cooperative effort between a community hospital and six nearby public libraries. Users, however, may come into direct contact with the network (but may be unaware that networking is involved) when a public library must refer to the collections of another member library or the hospital. The staff from one of the public libraries might refer users to the hospital for services, such as online searching of the MEDLINE database. The Regional Energy/Environment Center links information providers but users do have direct access to networking capabilities through the staff of the Center.

SOURCES AND LEVELS OF FUNDING

Will the networks be dependent on funding, in particular from the Federal Government, for the initiation and continuation of consumer information services?

Federal funding has played a critical role in the provision of consumer information services by the following five networks interviewed:

- Community Health Information Network
- Consumer Education Resource Network
- The Free Library of Philadelphia
- The Nassau Library System
- Regional Energy/Environment Center

Federal funding was necessary either to start the network or to establish certain services. The withdrawal of Federal funding has imposed a great hardship, one from which some of the networks may not be able to recover. At any rate, all networks have attempted to explore alternative sources of funding.

The CHANNEL 2000 was mainly supported by OCLC, with approximately one-fifth of its $500,000 funded by the BANK ONE of Columbus, Ohio. Two of the other networks, the Massachusetts Executive Office of Consumer Affairs and the Middlesex County Extension Service, are parts of State governement and therefore rely on governmental budgeting processes for their funding. Finally, the Better Business Bureau is a private, non-profit organization supported by private business. For example, the Better Business Bureau of Western Massachusetts is financed by membership dues and subscriptions paid by businesses and professional firms in the community.

Will the networks be dependent on outside funding for their survival?

At this time, only three of the networks depend largely upon outside funding. Both the Regional Energy/Environment Center and Project CHIN are seeking support from the private sector. The Denver Public Library is currently exploring the possibility of joining with the private sector in a joint venture to market the services of the Conservation Library and to make it self-supporting. The intention is to produce a fee-based information service operated out of a public library, with funding from the private sector.

Project CHIN receives support from member libraries, in the form of collection development and assigning staff to provide basic services, as well as from the hospital. The salary of the Director of the network is paid by the hospital and an investment corporation.

On the other hand, CERN is entirely dependent on Federal grants. The contract with the U.S. Office of Consumers' Education ends in March 1983. At that time, outside support must be available or the network terminates. CERN has developed a marketing plan by which it hopes to attract outside funding. It wants to find a "safe house" in the Federal Government or, as an alternative, full support from a business, foundation, university, or educational association. Staff members at CERN have already opened discussions with these various target groups, in an effort to gain support and suggestions on the most appropriate location for the network. Since the interview, the researchers have learned of the resignations of CERN's several key staff. This can be taken as a signal for CERN's inability to come up with viable financial alternatives at this difficult time.

STAFFING

Will the success of the networks be linked to the number of staff employed?
Will the staff believe that they are performing a vital role?

On the basis of the on-site interviews, success cannot be equated to the number of staff members employed. In many cases, the number of staff members in most of the networks interviewed is exceedingly small. The Regional Energy/Environment Center, for example, is currently staffed by two full-time librarians and one part-time staff member. The staff firmly believe in the goals and objectives of the network and wish that other libraries would become more actively involved with the provision of consumer information services.

The number of staff, combined with available funding, do have a significant impact upon the services that some the networks would like to provide. One staff member from the Middlesex County Extension Service, for example, suggested that "there is no end of the services that I could think of, if there were only the money." He also noted that the office was facing the possibility of severe staff cuts, which in turn was affecting the morale of the staff.

Will the networks currently be expanding the number of staff and services?

As this chapter has already indicated, the networks generally are not expanding the number of staff and services. If anything, they are consolidating positions and service programs. They are less willing to experiment with new services and want to "institutionalize" consumer services so that member libraries will be less willing to terminate them. They want the consumer services to be regarded as a priority activity of the network and central to the goals and objectives of the organization. The first part of this chapter suggests that some of the networks may not be totally successful in this regard.

Will the networks have no readily apparent problems related to staff morale?

In those cases where there is uncertainly about the future of the network or where the number of staff members is being severely cut, morale problems are present. The staff members interviewed, however, were found to be deeply committed to their work and their philosophy of service, and demonstrated a sincere excitment about their activities. They were trying to keep budgetary problems from affecting their relationship with users of the network, and wanted to think that the difficulties would be resolved.

DEGREE OF SUPPORT FROM MEMBER LIBRARIES AND ADMINISTRATIONS

Will the networks, in these times of financial retrenchment, have the full support (financial and other) from members libraries and their administrators to continue their consumer information services?

This chapter has shown that financial retrenchment has affected the number and type of services offered by many of the networks examined. The member libraries may want to continue their support but as in the case of Project CHIN, financial retrenchment may affect the ability of some of the member libraries to participate. The interviewing did not examine the consumer information services in relationship to the full range of services and activities provided by the library networks. Consequently, the full impact of the support from the library administration cannot be determined. For example, the Regional Energy/Environment Center is operated by the Conservation Library. The interviewing focused on the Center rather than on the Conservation Library and the Denver Public Library per se.

Some of the networks are dependent upon outside funding and the library itself may be unwilling to absorb all the costs or it may prefer to carry out the consumer information services on a much smaller scale. Such examples question the extent to which some administrators want to support consumer information services. However, this point can be overstressed; after all, the interviews were typically not conducted with library administrators. Their viewpoints therefore were provided through the interview subjects.

SERVICES

Will the networks have articulated a philosophy of service?

As the interview reports in Part II of this Report indicate, the networks have developed a philosophy of service consistent with their stated goals and objectives. Some of the networks, however, provide more extensive service than others. For example, they may be involved in the interpretation of information and advocacy, or their network staff may be able to expand their commitment to referral practices and to view referral as in integral part of a philosophy of service by having access to WATS line and subsidized long - distance telephone calls. Perhaps the philosophy of CERN is the most outstanding one. The staff members there identify relevant source materials and engage in referral practices; they also verify the accuracy and up-to-dateness of printed information before they disseminate it to their clientele.

It would seem that the number of staff and the budgeting situation impact upon the philosophy of service of a network. Some of the networks interviewed would like to provide even more services and to more fully meet the information needs of their clientele, if sufficient staff and funding resources were available. Most revealing in this regard are the comments of those interviewed concerning the role of new technology and network plans over the next several years. Clearly some networks are consolidating consumer services, questioning their ability to implement new services, and attempting to encourage other information providers to join with them so that consumers can make use of a greater range and depth of services. These networks must be conscious of costs and the degree to which their target audiences will pay for services. Presently, the Regional Energy/Environment Center is considering charging the private sector for some of the services performed. More networks may feel compelled to avail themselves of this alternative and to charge a fee to certain segments of the library's clientele for the use of some of their services. The initiation of fee-based services would push more networks into the adoption of a more liberal philosophy of service - the supplying of requested information in an easily digested and repackaged form and the initiation of referral practices on behalf of users. The purpose would be to assist clientele in gaining access to needed information regardless of whether that information was available within or outside the particular network.

Will the networks provide consumer information services gratis?

In most case, the answers would be in the affirmative. The major exceptions would be for conducting online searches of bibliographic databases and for soil testing conducted by the Middlesex County Extension Service. As was previously noted, the Regional Energy/Environment Center may consider the initiation of a fee-based service with support from the private sector. If the present ability of networks to provide consumer information services decreases, more consumers may have to pay for essential services.

There may be no alternative if the service is to remain; a fee assessment would show how essential consumers view the information service, since they are willing to pay for such a service at this time of financial retrenchment.

Will the networks perceive the provision of referral services as an essential aspect of their activities?

All of the networks interviewed appear to be actively engaged in referral practices. As already noted, the availability of subsidized telephone lines encourages referral. For example, CERN views referral as the ability to obtain additional information and to verify the accuracy and currentness of information available in printed form.

Will the networks be able to provide personal and aggressive reference services?

Networks such as the Regional Energy/Environment Center used Federal funding to subsidize referral practices and the making of long distance telephone calls on behalf of its clientele. Further, clientele outside the Denver County can call the Center on a toll-free line. However, staff budget cuts, as well as withdrawal of the subsidized telephone lines, are making an impact on the provision of personal and aggressive reference services. In the case of the Middlesex County Extension Service, the farm clientele of the network are currently turning to other information providers since staff of the Middlesex County Extension Service cannot regularly visit their clientele throughout the County and to provide diagnostic information to farmers from in-person visits.

RELATIONSHIP TO OTHER NETWORKS

Will the networks have identified other networks providing consumer information services and attempted to work with these other networks?

To varying degrees, the networks have identified other networks providing consumer information services and are attempting to work with them. As a generalization, non-library networks are more extensively involved in the identification of other networks. However, non-library networks are more likely to specialize in consumer information services. Further, library networks may believe that they can meet the information requirements of their clientele without having to resort to working with a variety of other networks. It should be emphasized, however, that staff from library networks may work closely with community groups but not specifically with other formal networks on a regular basis.

NETWORKS' PRIORITY ON CONSUMER INFORMATION SERVICES

Will the networks focus largely or exclusively on consumer information services?

2000 represents an experimental project involving new technology and is therefore difficult to categorize. The Better Business Bureau of Western Massachusetts, the Massachusetts Executive Office of Consumer Affairs, and the Middlesex County Extension Service have established programs, ones which take the various staffs beyond the role of information acquisition and dissemination.

Reference viewed in terms of an "active role" can relate to the type and extent of services offered. The reports for the Regional Energy/ Environment Center, CERN, the Nassau Library System, and Project CHIN have identified diverse and innovative services. These services reflect networks actively engaged in meeting their clients' information requirements on a regular basis. There is a response to perceived needs and a realization that with planning and regular consultation between network headquarters and members, the members will continue to support various services. Networks might even expand to serve new constituents and develop service programs to meet specialized needs. For example, the Regional Energy/Environment Center has developed a contractual relationship to supply a State agency with services it cannot perform and which are not performed elsewhere. However, internal problems faced by the Center, as well as the budget cutting environment in which government currently operates, will limit the ability of the Center to renegotiate a similar contract in the future.

ACTIVITIES ENGAGED IN

Will the networks be actively engaged in information interpretation and advice?

Few of the networks studied viewed information interpretation and advice as part of their responsibilities (see Chapter 4). This activity generally rated a four or five on a five-point scale, where five was the lowest priority. Both CHANNEL 2000 and the Nassau Library System identified this activity as high priority (rated "1"); however, the Public Library of Columbus & Franklin County rated information interpretation and advice as a four. Only two non-library networks, the Colorado Energy Extension Service (which has a contractual relationship with the Regional Energy/Environment Center) and the Middlesex County Extension Service, rated this activity as an one. This demonstrates the sharp difference between library and non-library networks.

Will the networks be in agreement concerning the activities which libraries should engaged in?

All the networks agreed that libraries should be engaged in information dissemination and referral. With the exception of the Better Business Bureau of Western Massachusetts, the networks also agreed that information acquisition and organization were priority activities. Next, but of less importance, were document delivery and consumer education. The other activities (information interpretation and advice, advocacy, lobbying, and problem-

Library networks, as has already been indicated, view consumer information services as but one of their responsibilities. It is not uncommon for these networks to define consumer information in terms of community services. This definition goes well beyond the definition of consumer services to which many non-library networks adhere. Further, libraries may not always see the need to develop or join networks for the provision of consumer information. Community files and other service programs may fulfill their definition of consumer information services. Perhaps networking for other areas is more cost/beneficial.

Will the networks have responded to perceived needs for consumer information services?

The networks saw a need for consumer information services and realized that other networks were not effectively filling the void. In the case of governement supported networks, there is a perceived responsibility for protecting and educating consumers. Interestingly, networks may respond to perceived needs in various ways. For example, the Free Library of Philadelphia, which responds to the needs of branch libraries, produces bibliographies and other aids that may be of value to branch libraries and their clientele. Project CHIN was created because public libraries wanted to improve their access to health information and because the Mount Auburn Hospital wanted community residents to associate the hospital with their health care. CERN materialized because the Federal Government and consumer educators saw a need for a clearinghouse of consumer resources. Apparently neither group perceived libraries as filling the role; consumer educators, it was believed, had important information needs that went unmet. CERN has been able to demonstrate, since its initiation, its importance as an effective and efficient information provider. However, it is worth noting that CERN refers clients to libraries but finds infrequent instances of referral from librarians to CERN for its services.

Will the networks plan to expand their consumer information services over the next several years?

Without exception, the answer is in the negative. They lack both the human and financial resources to expand such services. Further, governmental funding agencies no longer view consumer information with the same priority that they did several years ago. Most of the networks may be fighting for their very survival and realize that this is not the time for an expansion of services.

Will the networks play an active role in the provision of consumer information services?

There was substantial variation concerning the type of role that the networks played. The Free Library of Philadelphia was the most traditional among the nine interviewed, while CHANNEL solving) reflected the most variation and demonstrated the least consensus. See Chapter 4, Table 4.2.

Will the networks view information interpretation/advice and problem-solving as crucial areas for libraries to develop their consumer information services?

As already noted, on the whole, information interpretation and advice was not viewed as a high priority. Those interviewed also could not reach a consensus concerning the importance of problem-solving (see Chapter 4, Table 2). Obviously neither activity is uniformly viewed as priority items in which libraries should be engaged.

RELATIVE IMPORTANCE OF CRITERIA IN PROVIDING INFORMATION

Will the networks be in agreement concerning the relative importance of the five criteria?

Table 4.3 of Chapter 4 depicts the response of each network interviewed. The network staff interviewed could not all agree about which of the five criteria (accuracy of the answer, understandibility of the answer, up-to-dateness of the information, the time it took, and the cost in terms of money) was the most important. Those interviewed from the non-library networks, however, agreed that accuracy of the answer was the most important. Except for CERN, the non-library networks also agreed that up-to-dateness and understandability were important criteria. The staff interviewed disagreed concerning the importance of the cost in time and money. The Better Business Bureau of Western Massachusetts and the Massachusetts Executive Office of Consumer Affairs rated these two criteria much higher than did the Middlesex County Extension Service and CERN.

As a generalization, staff members from the five library networks also rated accuracy as the highest priority, followed by up-to-dateness of the information and understandibility of the answer. The Nassau Library System and the Free Library of Philadelphia rated both time and cost as high priorities, while the other librarians viewed these criteria as less important.

PUBLICITY AND MARKETING

Will the networks exploit a variety of publicity techniques?

The consumer programs are highly visible and are subject to some creative methods of publicity Chapter 4, as well as the individual reports contained in Part II, discuss the various methods. Publicity was frequently viewed in the context of marketing strategies appropriate to the services provided. Networks such as CERN and the Regional Energy/Environment Center more or less adhere to the basic steps of a marketing program outlined by Philip Kotler in his Marketing for Nonprofit

Organization: (1)

- conceptualizing the market
- analyzing the market
- determining the market programs
- administering the marketing programs

Information relevant to marketing can be gathered from an analysis of the information environment. Paraphrasing Kotler and various on-site interview reports included in Part II, such a review should address questions such as:

- Network Market
  - Who are the network's major markets and public?
  - What are the major market segments in each market?
- Network Clientele
  - How do the clientele feel about the network?
  - What are the information seeking patterns of end users?
  - What are the present and potential information needs that the clientele believe that the network can satisfy?
- Competition
  - What are the other information providers, institutional and other, that compete for the network market?
  - How successful are these competitors in satisfying information needs of the present and potential network users?
- Macroenvironment
  - How have the network information services and programs been influenced or affected by social, economic, technological, governmental, and cultural developments?

After conceptualizing library markets, networks should analyze the market, as CERN has done. Such an analysis involves the identification of network marketing problems, as well as an analysis of the network structure and consumer. In all these areas, it can be helpful to conduct a needs assessment study.

DETERMINATION OF USER SATISFACTION

Will the networks have undertaken a needs assessment and have gathered data in user satisfaction?

The networks have found generally to have not undertaken a needs assessment. However, if they have completed one, it was

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[1] Philip Kotler, Marketing for Nonprofit Organizations. Englewood Cliff, NJ: Prentice-Hall, 1975. Also the 1981 edition.

usually as a part of Federal grant requirements and occurred early in the history of the network. Typically, there were no regular, on-going efforts to update and compare study findings. The networks interviewed, however, often gather and analyze statistics on users of their services; copies of their data gathering forms are reprinted in several on-site reports in Part II. For example, both CERN and the Better Business Bureau of Western Massachusetts regularly survey users of their services, while the Regional Energy/Environment Center gathers statistics on their users.

Will the networks be in agreement concerning the methods for determining user satisfaction?

Chapter 4 summarizes some of the methods used to determine user satisfaction. Suffice to say, networks rely on both formal and informal methods. Formal methods focus on a mail survey of clientele once a specific information need had been resolved (e.g.,the Better Business Bureau of Western Massachusetts and CERN) or the completion of a questionnaire given to clientele once they were ready to leave the network facilities (e.g., the Regional Energy/Environment Center). Informal methods include unsolicited written letters of praise and oral expressions of appreciation. In the case of the Massachusetts Executive Office of Consumer Affairs, user satisfaction and the success of the service are measured also by the amount of money saved the user of the service. On the whole, the networks seemed to be in agreement that an important method for determining user satisfaction is to monitor the number of repeat users and ask first time users how they became aware of the network and its consumer services. Such a procedure enables network staff to gain an impression of how extensively the satisfied clientele publicize network services by word-of-mouth.

CONCLUSION

Interview findings of the nine selected networks were compared in the previous chapter, and the detailed results of each interview are included in Part II. Armed with these data, the researchers have made a serious attempt, in this chapter, to address all the research questions under the thirteen areas of considerations of the assessment model as presented in Chapter 2. It has been noted earlier that this project does not permit us to develop a precise statistical model to measure accurately the effectiveness of library networks' capabilitity to deliver consumer information. It is clear, however, from our discussions in this chapter that we have been able to identify the key components of an assessment model. These factors should be taken into serious consideration when developing library networks' consumer information services.

CHAPTER 6

CONCLUSION

The previous chapters have explained the contracted study, its purpose and the method by which the researchers carried it out. They conducted a comprehensive survey of the existing literature related to networking for consumer information services and produced a bibliography of pertinent literature in Chapter 1. They also developed an assessment model by which the basic factors comprising success of a consumer related information network could be determined. Given the fact that previous research has not examined networking for consumer information services and that the investigation was limited to nine networks, the researchers formulated research questions (see Chapter 2) and tested them through on-site interviewing. The on-site interviewing was conducted at nine selected networks, five from the library field and four from non-library related areas. Prior to the selection of the nine networks, it was necessary to identify the number of existing library networks engaged in the provision of consumer information and to develop a typology of non-library networks. The nine networks selected for in-depth investigation could therefore be representative of network types and service programs (see Chapter 3). The individual reports of the nine networks are presented in Part II, while Chapter 4 summarizes some of the major similarities and dissimilarities among the networks studied. Chapter 5 then reexamines the research questions in light of the Interview Guide, which was pretested on members of the Advisory Group, and analyzes interviewing findings.

The limitations to a study such as this one have been explained in various chapters. Suffice it to say, the study did not permit strict statistical comparisons among the nine networks. The Interview Guide provided a general outline for conducting the interviews; it should not be regarded as a questionnaire in which every question was pertinent to a given situation. Nonetheless, extensive data were gathered; these data illustrate various definitions of consumer information services and the ways that nine networks are attempting to provide such services.

The interviews show that consumer information services developed at a time when both such types of services were needed and sufficient funding was available to initiate programs. Currently, networks are, as a general rule, not expanding such service programs; to the contrary, they are trying to preserve existing ones. Clearly innovation is tied to factors such as the availability of funding, sufficient numbers of staff, adequate resources, and a perceived need for such programs. Funding is the underlying factor; once it diminishes, it impacts upon the other factors.

All segments of society, including government agencies, cities and towns, and hospitals maintain libraries. Public libraries, for example, comprise service institutions and frequently have the ability to enhance local resources by engaging in networking. By networking, libraries can supplement their existing holdings (no one library can hold all the information that its users might need), while linking to other libraries and improving the cost/effectiveness of operations and services through resource sharing. Consumer information services are now becoming more expensive to offer and thus libraries may not play a major role in providing community residents with such types of information services. Furthermore, residents may not associate libraries with many of their information needs. They might regard libraries as second-class, information providers, ones mostly relevant to recreational needs (1). Changing this pattern will be a difficult process. Nonetheless, the interview reports contained in Part II show that the provision of consumer information services may comprise one means by which libraries can attack popular impressions and better serve a wider variety of citizens' information needs.

Networks can, but need not, provide online computer access to information services (2). The case studies presented in this report emphasize that online access typically focuses on data base searching. Other applications specifically limited to consumer information services are few. However, as more libraries automate their operations, consumer information services will be impacted. For example, the OCLC's CHANNEL 2000 and "Maggie's Place," operated by the Pikes Peak District Library, Colorado Springs, Colorado, provide consumer information services as part of their total offerings. Undoubtedly with the further applications of new technology and the wider availability of home computers, more libraries will be able to develop similar service programs and to share their services with other communities and information providers. Systems are emerging that permit home telephone and television sets to act as terminals for gaining access to library catalogs and other types of information. Libraries will be expanding their role in this regard and will cooperate with cablevision so that more information can be accessed from the home. Libraries will be able to provide consumer information services faster, easier, but cheaper with the help of new technology. The question therefore

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[1] Ching-chih Chen and Peter Hernon, Information Seeking: Assessing & Anticipating User Needs. New York: Neal-Schuman Publishers, 1982.

[2] For an overview of networking, see Critical Issues in Cooperative Library Development: Networks by Barbara E. Markuson & Blanche Woolls, Indiana Department of Public Instruction, Division of Instructional Media. Prepared pursuant to Grant No. G007805130 from the Office of Libraries and Learning Resources, Office of Education, U.S. Department of Health, Education and Welfare.

becomes what shape will consumer information service programs take (e.g., community information files or the types of services offered by CERN, the Nassau Library System, or the Regional Energy/Environment Center) and what types of funding will be available. It would seem natural that given the present funding situation, consumer information services are not expected to command the same priority that they did a few years ago. With the promise of new technology, most likely more libraries will utilize this technology more to develop their consumer information networks in order to meet their clientele's diversified information needs.

Some networks could be characterized as a single type cooperative network, meaning that they serve a single type of information provider. Current funding priorities may force more networks interested in the provision of consumer information services to become multi-type cooperative networks which serve more than one type of information provider. Libraries therefore would expect to link more with other information providers in order to expand their capacity to provide information and referral services.

Traditionally, libraries have been associated with such functions as information acquisition and organization, active information dissemination, and coordination of diverse information resources. The wise application of technology can expand their effectiveness in fulfilling these traditional roles. Although a library's active participation in community affairs may still be the exception rather than the rule, the examples of innovative programming presented in Part II of this report may comprise one of the most important aspects of this exploraory study. Further research might explore consumer information services provided by public libraries and determine the type of consumer information that can be met on a local basis. Still, networking can be beneficial. It calls attention to innovative programming and enables such programs to be available outside the local context. Project CHIN, for example, unites a hospital library and six public libraries so that the libraries can develop their collections and improve their reference and referral services in the area of consumer health information.

APPENDICES
TO
Part I

APPENDIX 1.

INTERVIEW GUIDE

Criteria of Effectiveness for Network Delivery of Citizens Information Through Libraries

INTERVIEW GUIDE:

Network Headquarters
or
Member Institutions

Name of Network ______________________________

Name if Member Institution ______________________________

Respondent's Name ______________________________

Title ______________________________

Telephone Number (______) _____ - ______________ ext. ________

Interview Date ______________________________

Length of Interview ______________________________
(minutes)

Comments ______________________________

____

____

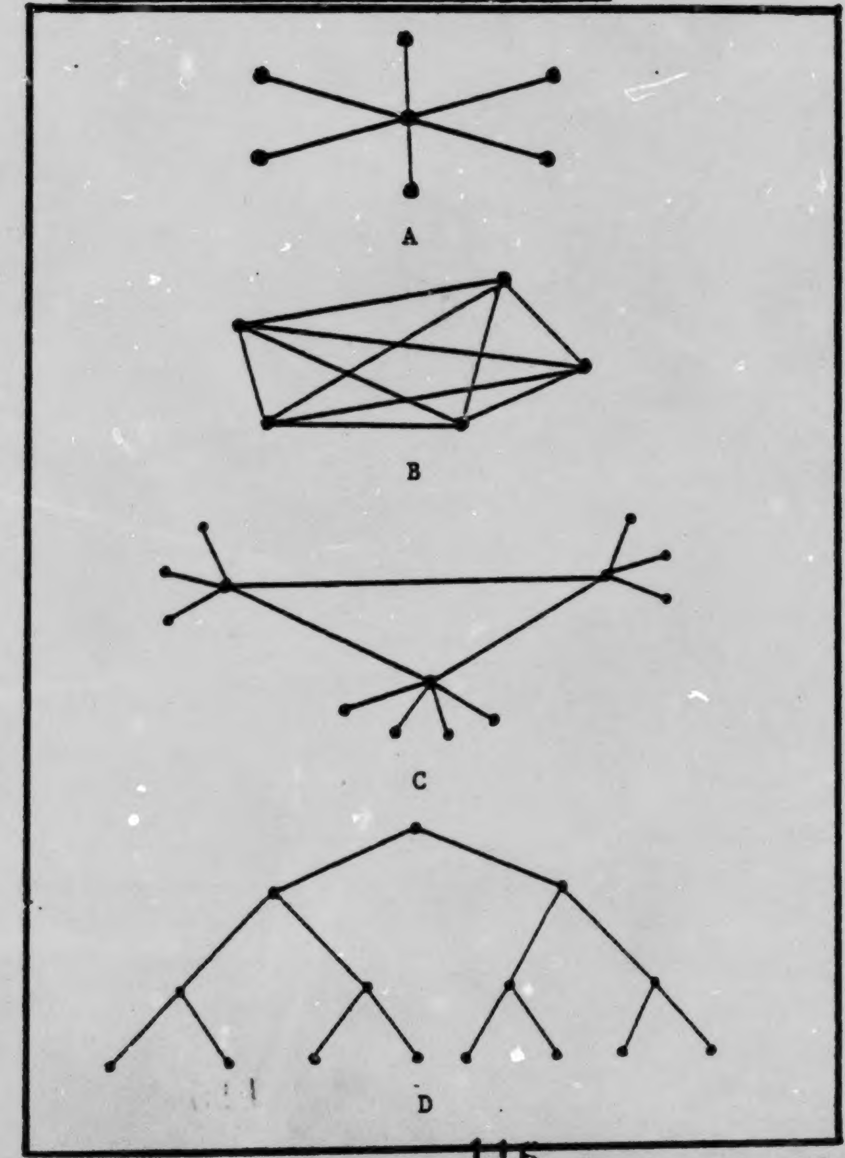
____

ORGANIZATIONAL STRUCTURE

HEADQUARTERS 1. How would you view your network's organizational structure? (Please answer the following categories with either 'yes' or 'no.')

	YES	NO
A) Totally Centralized (Star)	___	___
B) Totally Decentralized	___	___
C) Distributively Centralized	___	___
D) Hierarchically Arrayed	___	___

(SHOW PERSON INTERVIEWED THE FIGURES.)



NETWORK GOALS

HEADQUARTERS 2. Please explain briefly what are the most important, current goals of your network. (If there is a written statement on these goals and objectives, obtain it.)

HEADQUARTERS 3. The next four questions ask for your opinion of how your network goals are defined and communicated. We will be using a scale of one to five where one signifies "to the greatest extent" and five signifies "to the least extent."

(HAND PERSON INTERVIEWED A COPY OF THE QUESTIONS.)

A) Using this scale of one to five, please tell us to what extent you believe members of your network are aware of these goals?

1 2 3 4 5

B) To what extent do you believe end users of your network (be they citizens or member institutions) are aware of these goals?

1 2 3 4 5

C) To what extent do you believe these goals are being achieved?

1 2 3 4 5

D) To what extent has your network developed plans to meet these goals?

1 2 3 4 5

GOALS FOR CONSUMER INFORMATION SERVICE

BOTH 4. What are the most important current goals for this service? (Also, ask for a written statement. Ascertain their definition of consumer information.)

BOTH 5. The next four questions ask for your opinion of how your network's consumer goals are defined and communicated. We will again be using a scale of one to five where one signifies "to the greatest extent" and five signifies "to the least extent." (HAND PERSON INTERVIEWED A COPY OF THE QUESTIONS.)

A) Using this scale of one to five, please tell us to what extent you believe members of your network are aware of these goals?

1 2 3 4 5

B) To what extent do you believe end users of your network (be they citizens or member institutions) are aware of these goals?

1 2 3 4 5

C) To what extent do you believe these goals provide a workable framework for the daily operation of your network?

1 2 3 4 5

D) To what extent has your network developed plans to meet these goals?

1 2 3 4 5

CONSUMER INFORMATION SERVICES

BOTH 6. With our definition of consumer information in mind, please describe briefly the type of consumer information services that the network currently provides.

BOTH 7. In reference to your answer to question 6, how are consumer services provided?

by telephone ______________________________

by mail ______________________________

in-person ______________________________

other ____

____

____

BOTH 8. A. If telephone assistance is provided, is a toll-free number available?

YES _____ NO _____

B. If telephone assistance is provided, do you find that users often encounter problems in getting through? (Any complaints about the telephone being busy?)

YES _____ NO _____

BOTH 9. In filling user questions, is there access to special telecommunication equipment such as a WATS line?

A) YES ____ NO _____

B) Please specify the types: ________________________________

____

____

BOTH 10. In what year did the network (or member institution) become involved in consumer information services? ________________

BOTH 11. Why did the network (or member institution) become involved in consumer information services?

BOTH 12. Please describe briefly the type of consumer information services that the network plans to provide within the next two years.

BOTH 13. Who are the targeted audience(s) for this service? (Is there a written description of the audience?)

A. General Public ______________

B. Health Professionals __________

C. Faculty Members ______________

D. Students ____________________

E. Other (Please Specify)

____

____

____

HEADQUARTERS 14. How do the consumer information services fit into the network organizational structure depicted in Question 1?

HEADQUARTERS 15. Are the consumer services provided located in:

network headquarters only ______________

member libraries only __________________

library and community centers __________

other (please specify)

____

____

____

HEADQUARTERS 16. Can you provide a layout of the physical facility?

BOTH 17. How many days per week are the consumer services provided? ______

BOTH 18. What are the hours that the consumer services are provided? _______

BOTH 19. What links do you maintain with other networks engaged in the provision of consumer information services? (Do they provide services which you do not offer - probe cooperation - why and how?)

LIBRARY INFORMATION NETWORKS

(Only library-related networks complete this section)

BOTH 20. Do you consult non-library networks in providing your consumer information services?

A) YES ____ NO _____

B) Please explain your answer.

BOTH 21. Do you view this referred source (can be either library or non-library related) as successful in meeting user needs? Please rank the general success ratio on a scale of one to five, with one as 'most successful' and five as 'least successful.'

1 2 3 4 5

BOTH 22. On what do you base this judgement?

FUND ALLOCATION

BOTH 23. What percent of the budget for the last fiscal year is (please specify):

Federal grants ______________

State grants ________________

Local grants ________________

Federal budget ______________

State budget ________________

Local budget ________________

User fees ___________________

BOTH 24. What percent of the network budget for the last fiscal year was allocated to public service? ________________

BOTH 25. Are the consumer services provided gratis, or is there a user fee?

A. GRATIS _____ FEE _____

B. Please explain your response.

BOTH 26. We are interested in how your network allocates its monies to the provision of consumer information services. Please rank order, if possible, the network service budget which goes to supporting those activities relevant to consumer information services. Please keep in mind that the total percentage should not be over 100.

(SHOW INTERVIEW SUBJECT THE CATEGORIES)

	Rank Order of Public Service Budget (Last Complete Fiscal Year)	Plans for Next Year		
		Decrease	The Same	Increase
Document Delivery				
Home Delivery				
I & R				
Info-line, Jobline, etc.				
Consumer Education				
On-line Bibliographic Services				
Publicity				
Other Services: (SPECIFY)				

BOTH 27. If fund allocation is likely to be changed from this fiscal year's public service budget for any of the responses to Question 26, please explain why.

BOTH 28. If the network is dependent on government funding, do you foresee any reduction in financial support over the next several years?

BOTH 29. If you anticipate a lessening of financial support from government sources, do you plan to maintain the current level of programs and services? YES _____ NO _____

Please explain.

BOTH 30. We are interested in knowing the number of staff members involved in providing consumer information in your network headquarters or member institution.

A. What is the number of professional staff members in your network headquarters or member library: ________________

(ASCERTAIN THEIR DEFINITION OF PROFESSIONAL:

____

____

____

____)

B. How many of them engage in public services for consumer related information? (Full time equivalent estimation): _____

C. How many of them are stationed in the headquarters? _________

in other parts of the network? ________

(PROBE ON THE BASIS OF NETWORK STRUCTURE.)

BOTH 31. What is the educational background of staff members?

BOTH 32. Are staff members generalists or do they specialize in an aspect of consumer information? Please explain your response.

BOTH 33. Do staff members receive special training concerning the provision of consumer information and the art of interviewing?

A. YES _____ NO _____

B. Please explain your answer.

BOTH 34. Would you characterize staff turnover since the beginning of 1980 as low ______, medium ________, or high _______?

Please explain your answer to this question.

BOTH 35. Do you anticipate any changes in staffing for the provision of consumer information in the next two years?

(Indicate %)

INCREASE	SAME	DECREASE
________	____	________

BOTH 36. If response to Question 35 indicates any changes, please explain why.

POLICY (CONSUMER INFORMATION)

HEADQUARTERS 37. In relation to the network goals relating to consumer information, we would like to know your network priority, in considering the importance of the following activities related to consumers. Responses will be on a scale of one to five, with one as 'most important' and five as 'not important at all.'

A) Information Acquisition and Organization	1	2	3	4	5
B) Information Dissemination	1	2	3	4	5
C) Information Referral	1	2	3	4	5
D) Document Delivery	1	2	3	4	5
E) Information Interpretation/Advice	1	2	3	4	5
F) Consumer Education	1	2	3	4	5
G) Advocacy	1	2	3	4	5
H) Lobbying	1	2	3	4	5
I) Problem-Solving	1	2	3	4	5

HEADQUARTERS 38. For the activities mentioned in the preceding question, we are interested in knowing which one(s) your consumer information service covers. Check those that apply and state the reason why the particular service is provided:

(LET RESPONDENT SEE THE LIST)

A) _____ Information Acquisition and Organization

B) _____ Information Dissemination

C) _____ Information Referral

D) _____ Document Delivery

E) _____ Information Interpretation/Advice

F) _____ Consumer Education

G) _____ Advocacy

H) _____ Lobbying

I) _____ Problem-Solving

PUBLICITY OF CONSUMER SERVICES

BOTH 39. For the type of activities related to consumer information which the network provides, we are most interested in knowing how the network headquarters/member library publicizes these services to your end users (people). Please list.

(PROBE: WHERE, HOW, COST)

BOTH 40. Which of the methods specified in the response to Question 39 do you consider most effective and why?

CONSUMER INFORMATION SOURCES

BOTH 41. What are the types of sources you generally find most useful in providing your consumer information services. Please indicate on a scale of one to five, with one as 'most useful' and five as 'least useful.'

(LET RESPONDENT SEE THE FOLLOWING CATEGORIES.)

A)	Book Publications ————————	1	2	3	4	5
B)	Journal Publications ———————	1	2	3	4	5
C)	Newsletters ——————————	1	2	3	4	5
D)	Trade Publications ————————	1	2	3	4	5
E)	Mailing Lists from Agencies, etc. -	1	2	3	4	5
F)	Government Publications —————	1	2	3	4	5
G)	Personal Contacts ————————	1	2	3	4	5
H)	Government Agencies ———————	1	2	3	4	5
I)	Radio/TV Spots —————————	1	2	3	4	5
J)	Other (SPECIFY)					
	______________________	1	2	3	4	5
	______________________	1	2	3	4	5
	______________________	1	2	3	4	5

BOTH 42. Was the collection of consumer resources developed especially for the network's service, or does the collection pre-date the service?

MEMBER INST. 43. When using these above information sources to provide consumer information services, which of the following five factors do you consider most important? Please rank with number one as 'most important' and number five as 'least important.'

(LET RESPONDENT SEE LIST.)

_____ the cost in money
_____ the time it took
_____ its up-to-dateness
_____ the accuracy of your answer
_____ the understandability of your answer

MEMBER INST. 44. Please elaborate on your ranking in the preceding question.

INFORMATION TRANSFER AND NEW TECHNOLOGY

HEADQUARTERS 45. More consumer information services are becoming available in nonconventional ways (e.g., home delivery of information, and provision of information at supermarkets by utilizing new technology such as computer terminal facilities). What part, if any, does new technology have in relation to the consumer information currently provided?

BOTH 46. Is it likely that any other new technologies will be implemented in the area of consumer information in the next two years? Please list.

BOTH 47. What kinds of new technology do you plan to use?

BOTH 48. Where will the network receive financial support for this type of application?

BOTH 49. In what way, if any, do you feel this type of application will help your network provide better consumer information services?

BOTH 50. In what way, if any, do you feel this type of application will hinder this type of service?

BOTH 51. Do you find that most users avail themselves of the service for the first time, or are they repeated users?

BOTH 52. Do you impose any limits on the amount of time spent in helping clients?

BOTH 53. Are users referred to the service?

A. YES _____ NO _____

B. Please explain your response.

USERS OF CONSUMER INFORMATION NETWORK

(Probe Questions 54 and 55 for Network Headquarters and Member Institutions dealing directly with citizens.)

BOTH 54. Do you keep records of who the end users of your services are?

YES _____ NO _____

BOTH 55. (IF YES) What type of records are kept? (Ascertain if we could use the list for survey purposes. We would reimburse staff for conducting the survey on our behalf.)

BOTH 56. In the past year have you undertaken or completed any needs assessments?

YES _____ NO _____

(IF YES) Can you provide a copy of the report? YES ____ NO ____

BOTH 57. (IF YES) Have any of the study results influenced your mode and plan for consumer information service provision?

USER SATISFACTION

BOTH 58. How do you determine the effectiveness of your consumer information service? Please list the three most important criteria, with the first as most important.

A)

B)

C)

BOTH 59. Do you have an evaluation process for determining the effectiveness of your consumer information service?

____ YES ____ NO

(IF YES) Probe, what is it?

(IF NO) Probe, why not?

BOTH 60. How do you justify your consumer information service to your administration for continuing support? Please describe.

ROLE OF LIBRARIES IN PROVIDING CONSUMER INFORMATION SERVICES

BOTH 61. In light of libraries' traditional role in providing information services. what role do you see libraries having in the provision of consumer information services?

BOTH 62. In reference to our earlier question on 'policy' of consumer information services, we would like to know what type of role you think libraries should play in the area of consumer information services? Please respond using a scale of one to five, with one as 'most important role' and five as 'least important.'

A)	Information Acquisition and Organization	1	2	3	4	5
B)	Information Dissemination	1	2	3	4	5
C)	Information Referral	1	2	3	4	5
D)	Document Delivery	1	2	3	4	5
E)	Information Interpretation/Advice	1	2	3	4	5
F)	Consumer Education	1	2	3	4	5
G)	Advocacy	1	2	3	4	5
H)	Lobbying	1	2	3	4	5
I)	Problem-Solving	1	2	3	4	5

BOTH 63. (FOR LIBRARY NETWORKS) In light of the current funding difficulties of traditional library services, what do you see as the potential for libraries in the area of consumer information services?

BOTH 64. (FOR NON-LIBRARY INFORMATION NETWORKS) Since information is a common word for your network and libraries, what do you see as the potential for libraries in working together with you in the provision of consumer information services?

BOTH 65. We appreciate that you have graciously spent your time with us. We hope you have a good idea of what we are looking for. Do you have any relevant documents or reports which you could share with us? These might provide a history or background of the network.

YES _____ NO _____

(RECORD TITLES OF SOURCES PROVIDED)

Thank you for your cooperation.

APPENDIX 2.

NETWORK SURVEY QUESTIONNAIRE

NETWORK SURVEY

Network Information: (Taken from the Directory of Library Networks and Cooperative Library Organizations.)

Person Interviewed____________________________Position____________

* *

Interviewer's Name _________________________

Date __________________ Time: From _____________ to ______________

Result of Call: Yes ____________ No ______________________

Comments: ____

____

NETWORK SURVEY

Introduction: "Hello, I am ________________ calling from Simmons College in Boston. We are working on a contract for the U.S. Department of Education and would like to ask you a few questions. The interview will only take a few minutes.

USE AS MANY OF THE FOLLOWING AS NECESSARY:

a) We got your telephone number from the Directory of Library Networks and Cooperative Library Organizations (National Center for Education Statistics, 1980.)

b) Offer them a Simmons telephone number (738-2224) to call to verify the survey or arrange for a copy of the findings to be sent out.

The purpose of this call is to find out if your network offers information to help people with their everyday problems, such as with money matters or issues relating to health or housing or energy."

1. Does your network currently provide this type of information service?

No__________

Yes __________
STOP: Proceed to Question 5.

2. Did the network ever provide such a service?

No__________

Yes __________

When did it stop?___________

Why did it stop?____________

____

____

____

STOP: Proceed to Question 3.

3. Does the network plan to provide such a service?

No __________
↓
Why not? ________________

____

____

____

____

Yes ______________
↓
When? ______________________
↓
Why? _______________________

____

____
↓
STOP: Proceed to Question 4.

4. Do you know of any networks, library or non-library, which provide information to help people in their everyday problem?

Yes__________
↓
Identify (city, address, telephone number, and contact person whenever possible)

____

____

____

____

____

____

____

____

____
↓
STOP: "Thank you for your time."

No __________
↓
STOP: "Thank you for your time."

5. Would you briefly describe the service? ____________________

____

____

____

6. Is the service provided directly to users?

Yes ____________ No ____________________.

7. By telephone ______________ How is it provided? ________

By mail ____________________ ____________________________

In-person __________________ ____________________________

Other (Please specify) ____________________________

___________________________ ____________________________

___________________________ ____________________________

8. Can you characterize who are the main users of the service?

____

____

9. Does your service include (check as many as apply):

_______a) Provision of information for problem-solving?

_______b) Information referral?

_______c) Document delivery?

_______d) Other (please specify) ___________________________

____

10. Do you know of any other network, library or non-library, which provides information to help people in their everyday problems?

Yes ____________ No ______________

↓ Identify (city, address, telephone number, and contact person whenever possible)

____

____

____

____

____

↓ STOP: Proceed to Question 11.

11. Do you have an annual report, goal statement, or any other pertinent documents on your activities?

Yes ____________ No ______________

↓ Please send a copy to:

U.S.D.E. PROJECT
Graduate School of Library
and Information Science
Simmons College
300 The Fenway
Boston, MA 02115

↓ STOP:

WE WANT TO THANK YOU FOR HELPING US PREPARE THIS SURVEY. WE MAY BE BACK IN TOUCH.

PART II.

REPORTS OF THE NINE CASE STUDIES

THE FIVE LIBRARY NETWORKS

CASE 1

COMMUNITY HEALTH INFORMATION NETWORK (CHIN)*

CAMBRIDGE, MASSACHUSETTS

The Community Health Information Network (CHIN) was created in 1977 by the Community Health Education Department of Mount Auburn Hospital (Cambridge, Massachusetts) and the hospital's Health Sciences Library in conjunction with the public libraries of six nearby towns [Arlington (Robbins Library), Belmont, Cambridge, Lexington (Cary Memorial Library), Somervilie, and Watertown]. The network seeks to:

- make accurate and timely health information (1) easily available to health care consumers and providers in the communities where they live and work
- provide current information on available print, audiovisual and human health resources in the community
- develop and maintain quality health and medical collections in the public and school libraries
- train public, school and health sciences librarians to assist users in finding information in the health sciences literature. (2)

As is evident, the purpose of CHIN is to make health and disease information easily available to residents of the six towns. The emphasis on promoting good health "has resulted in particular attention being paid to nutrition, exercise and physical fitness, stress reduction. smoking, alcohol abuse, and accident prevention. (3)

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* This report is based upon an interview conducted with Ms. Ellen Gartenfeld, Director of CHIN, on September 15, 1981.

[1] Health information is defined as: materials for both health care providers and consumers, in print and other formats (audiotapes, videotapes, films, etc.), which deal with maintenance, preservation and restoration of physical, mental or emotional well-being, including those items dealing with personal and public health, disease, medicine, therapeutics, surgery and other branches of specialized medicine.

[2] Department of Community Health Education, Mount Auburn Hospital, Community Health Information Network (CHIN). Prepared for Raven Systems and Research, Inc., Atlanta, Georgia, 1981. Summary p.1. (Hereafter referred to as the Raven Report).

[3] Ibid.

The network is confined to these towns and will probably not expand beyond them. Situated in a private hospital only serving the six towns, the network could not expand into other communities without support from outside funding agencies and by removing itself from the hospital. The hospital got involved with the network because it views itself as a service provider for the community -- a caring institution. It competes with other hospitals in the area and wants the community to associate Mount Auburn Hospital with its health needs. The public libraries also had practical reasons for joining with the hospital. They needed better access to information on preventive medicine and health maintenance, and were willing to accept the fact that the hospital would also derive something from the relationship. The network headquarters can make health care facilities and providers aware that public libraries contain health information. This awareness enhances the role of the public library in the community and makes an impact on library use and the quality of service provided. To repeat, the network brings together a hospital and six public libraries for the benefit of each. The libraries can tap the resources of the hospital as well as benefit from the referral contacts of the hospital.

The goals have basically remained the same since the network was founded. However, "the way that goal implementation is perceived changes; in other words, objectives change whenever funding priorities do." For example, in 1978, LSCA funding was to be used to expand services to public school systems of the six towns. The purpose was to identify and evaluate print and audiovisual instructional resources useful for classroom teaching. This proposed extension of network objectives was unsuccessful, due to the administrative structure of these libraries within the school system. Some of the school librarians reported to people who did not support libraries and appreciate the value of networking.

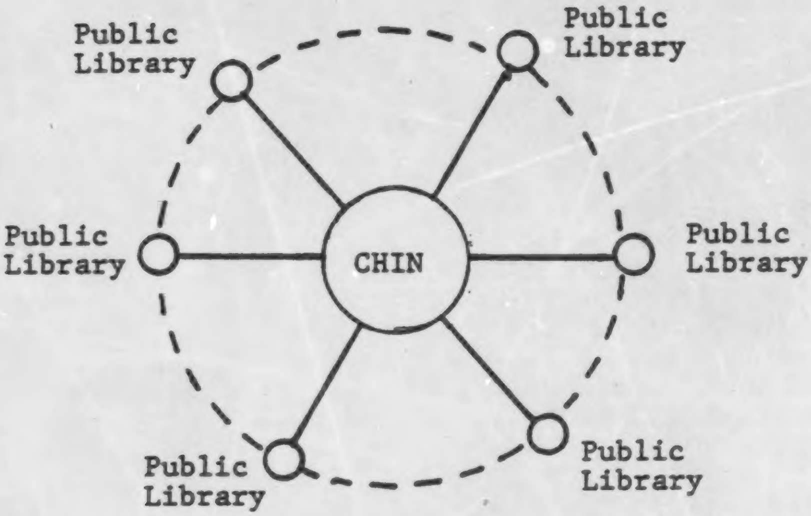
Ms. Ellen Gartenfeld of Project CHIN was asked a series of questions about how well the network's consumer goals are defined and communicated. She categorized her responses on a scale of one to five, where one signified "to the greatest extent" and five "to the least extent." She believes that member libraries are aware of network goals (rated a two), that the goals are being achieved (also a two), and that the network has developed plans to meet these goals (rated a one). Staff members at network headquarters have continuous interaction with librarians from the member libraries. Involvement in funded projects has also made network headquarters sensitive to the needs of member libraries and the community. With the network, health information is more easily available to member libraries, and these libraries now have staff members specially trained to provide health information. End user awareness of the goals was rated low (a four); the general public might not recall the name of the network or even be aware that the network was consulted.

The network office is located in the Department of Community

Health Education at the hospital, and it works closely with the Health Sciences Library. There is no contractual agreement between the hospital and the six public libraries; "much of the network's organization governance evolved as a result of the qualifications and interests of project participants." (4) The willingness to participate has been expressed through letters of support between the directors of the public libraries and the hospital.

Figure 1, which characterizes the organizational structure of the network, shows that the network headquarters has a direct relationship with the member libraries. There is still an opportunity for the member libraries to communicate with one another and thereby bypass the network headquarters. This personal interaction is perceived as a strength of the network. The network headquarters, in fact, encourages the interaction; it serves as a catalyst by bringing public service librarians from the member libraries together on a regular basis for in-service training and a discussion of common issues and problems.

Figure 1. Organizational Structure of CHIN



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[4] Ibid., p. 11.

CONSUMERS INFORMATION SERVICES

Through the network, the community can receive answers to the types of reference questions as shown in the following:

- What information do you have on Down's Syndrome?
- Where can I find a cardio-pulmonary resuscitation class?
- What is lupus?

The network also prepares on-demand bibliographies and take advantage of interlibrary loan. If a bibliography is compiled, "we select a few articles, duplicate these and send them on to the requestor. If the nature of the request suggests it, we also include information on any service agencies with which we are familiar." Public libraries can also make referrals to a non-library resource: the hospital. Referral is an important benefit of the network, because libraries and their users can have access to additional human and printed resources. On-line bibliographic searching is performed. Member libraries can take advantage of the existing in-service training programs, such as the one-day workshops and the monthly librarians' meetings) so that their staff members can better elicit information needs from their clientele and conduct more in-depth reference interviews. "Programs for Public librarians are aimed at familiarizing them with the field of biomedical information and keeping them up-to-date on new developments in the field." (5)

Library collections were in place before the creation of the network; networking, however, has improved collection quality. Through the network, core collections of professional biomedical materials designed to meet the needs of health care specialists were developed. The network headquarters, which draws upon the resources of the Hospital's Health Sciences Library, prepares guides to collections, helps evaluate resources, establishes selection criteria for print and audiovisual materials, maintains an on-going union list of health related holdings in the member libraries, and works closely with member libraries. The Hospital's Health Sciences Library maintains the union list. Each participating library periodically forwards copies of its shelflist cards for health-related materials. "These are interfiled and are available for use between publication of editions of the union list. Not only is this information used to arrange their interlibrary loan, it is also used by individual network members in deciding whether to purchase a particular item." (6) Further, each public library has identified an area of health in which it wishes to specialize; resource sharing enhances the value of the network to member libraries. Networking results in better prepared library staffs and collections, as well as better met information needs of community

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[5] Ibid., p. Summary 2.

[6] Ibid., p. 26-27.

residents.

Except for interlibrary loan fees, when applicable, and MEDLINE searching, the information services are provided gratis to end users. At both network headquarters and the member libraries, consumer services are provided in-person, by mail, or telephone. The headquarters offers it services Monday through Friday; variations occur with each member library. Given the geographic area served, a toll-free telephone number is not needed. Users may encounter some difficulty in contacting network headquarters. The general number of the hospital may be busy and those people visiting the hospital may encounter new volunteers at the information desk, who are unaware of the network and experience difficulty in locating its number in the general hospital directory.

Ms. Gartenfeld envisions the network continuing with its present array of information services for the next several years. The in-service training component, for example, is firmly in place. More attention might be given to the evaluation of materials. The intention would be to develop guidelines so that the member libraries could improve their own selection and retention decisions. In the past, staff members from the network headquarters have occasionally evaluated the collections of member libraries and supervised the weeding activities. However, this type of responsibilities will be given more to member libraries.

Innovation can also come from interaction with other networks throughout the nation engaged in the provision of health information services. Contact with health information professionals at the Medical Library Association, and through other channels, affords an opportunity to meet and discuss common problems, issues, and potential areas to exploit.

The network has identified the available resources relating health and disease, has developed library collections, and has improved the quality of reference and referral services; data have been gathered to support these beliefs. As Ms. Gartenfeld notes, "if the general public or public service staff from the member libraries cannot find the desired information and we can, they regard us as wonderful -- a very advantageous resource to have at their disposal." The degree of end user satisfaction with the network represents the area for which data have not been gathered. This type of evaluation is needed; the network, however, is too limited in human resources to plan and implement end user evaluation.

To recap, CHIN offers services of value to member libraries and the general public. Member libraries, for example, benefit from interlibrary loan, in-service training, collection development, access to a union list, and referral. End users receive high quality service, access to information, and the opportunity for computer searching. Programs for the general public provide education on health topics and call attention to the role of public libraries in providing health information.

Ms. Gartenfeld was asked to categorize the types of sources used in providing health information services, on a scale of one to five, with one as "most useful" and five as "least useful." Top priority was given to books, journals, personal contacts, producers of ephemera, and government publications (pamphlets and brochures of government agencies). Producers of ephemera encompass volunteer and social agencies of a non-government nature (e.g., planned parenthood organizations). Government documents are collected mainly from clearinghouses (e.g., Cancer Information Clearinghouse and the High Blood Pressure Program). Newsletters and trade publications received a two on the scale. Contacting government agencies and mailing lists rated a three, while radio/television spots were the least useful (a five).

Of the five factors presented in the interview guide, Ms. Gartenfeld suggested that understandability of the answer was most important. The accuracy and up-to-dateness of the answers tied for second position. Time placed next and the cost in money last. Health information networks should not convey information suggesting that problems are simple or can all be solved in one way. It is essential that points of view be balanced. Information, therefore, must be understandable, up-to-date, accurate, and balanced. Other factors are of lesser importance. Librarians, however, must indicate that they are not health care providers and that information given by them is derived from authoritative published materials or referral to recognized service agencies and organizations. Information, therefore, is provided and not evaluated.

USERS

CHIN serves the following populations:

- "Lay" people of all ages and backgrounds who use their public library to find health information or to attend programs
- elementary, intermediate and high school students seeking information on health topics in both school and public libraries
- teachers and other school health personnel
- health care providers, including physicians, nurses, pharmacists, nutritionists, health educators, psychologists, and allied health personnel, seeking professional materials for their own continuing education or materials for use in educating their patients
- students of any of the health professions listed above
- public and school libraries in the six communities
- professional librarians in schools, public libraries, and health science libraries throughout the country.(7)

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[7] Ibid., p. 30-31.

Under funding from the National Library of Medicine, effort was made to develop a professional user group in public libraries. However, it was found that many physicians were not active readers and did not consult public libraries for work related information needs. The development of a core collection of professional materials in public libraries, combined with interlibrary loan services, has provided nurses with greater access to needed information resources. Nurses need such information because of professional requirements for continuing education and advancement into more specialized fields such as delaing with death and dying.

For specific grants, a list of reference questions asked, and materials circulated, have been compiled and analyzed. "Much of our response to evaluation has been grant based. We lack the human resources to do more than this."

Evaluation of end users, however, has not been performed. Consequently the number of repeated users, in comparison to first time users, cannot be determined. Some users may be attracted by the ability of the network to provide computer searches.

User satisfaction with the health information network is determined in several ways. First, member libraries are still willing to participate in times of economic hardship. Secondly, these libraries have the specially prepared bibliographies and have improved the quality of their collections and services. Thirdly, "whenever we do a survey, we find that the libraries are receiving and answering more reference questions." Even though questions are answered, it cannot be determined how much of a difference the network makes. Any relationship between availability of information and its effect on people remains to be determined.

FUNDING

A sub-contract to report the history of the network was recently completed with Raven Systems and Research, Inc., of Atlanta, Georgia. It stated clearly, that initially, CHIN was funded by grants from the National Library of Medicine and the Massachusetts Board of Library Commissioners, using the Library Service and Construction Act (LSCA) monies. With the phasing out of grant funding, the support of Mount Auburn Hospital increased through contributions for personnel costs and overhead. The member libraries supported CHIN through allocations for the purchase of materials and the commitment of staff to network goals. The entire network budget supports public service activities. By special solicitation of funding, the network has been able to conduct an inventory of existing material, create a catalog of health-related resources available throughout the member libraries, explore the use of audiovisual aids in programs for health education in public libraries, and develop a resource guide to films in health education.

Network programs have encouraged the training of regular personnel to carry on the project once external funding has ceased. The Mount Auburn Hospital Health Sciences Library, for example, is maintaining the union list.

Proposition 2-1/2 and rising inflation are making a profound impact on public libraries in the state. Member libraries will maintain the present staff levels and collections the best they can. The Somerville public library, for example, may not be able to send a person to the network meetings. Perhaps newly hired employees at the public libraries, ones recently receiving the in-service training, will have to be dismissed. Ms. Gartenfeld believes that the network could survive the layoffs because it is well established and has the support of those holding administrative positions in the libraries. Still, network headquarters must be sensitive to economic and political realities, while at the same time searching for outside support. Part of Ms. Gartenfeld's salary is paid by the hospital; an investment corporation which is supportive of the network goals agreed to provide 50 percent of her salary.

The network has the support of the hospital staff and administration. The network coordinator, Ms. Gartenfeld, has gotten the administration involved in the planning and development of the network since its inception. She has also sought the support of key professional staff members. This helped to attract the increased financial support, with the demise of Federal funding.

Network headquarters is now staffed by two professional staff members, one a librarian and the other a trained researcher. As for the member libraries, reference librarians at the central site and librarians at many of the branches provide health information. However, the provision of health information is just one of their responsibilities.

When asked to rank order the items in the network service budget which supported those activities relevant to health information services, Ms. Gartenfeld emphasized that she was doing so from the viewpoint of the hospital. Consumer education, which encompasses in-service training, ranked first. Document delivery placed second; the hospital provides it gratis except in those instances in which charges arise from the member libraries. Information and referral (I & R) was third; two member libraries have extensive I & R services which the network headquaters and other libraries consult. In addition to these three activities, the network is engaged in on-line bibliographic searching, publication of resource guides, and publicity. The budget for the next year will reflect the same rank order, with one possible exception. More attention will be given to the development of resource guides so that member libraries can better evaluate their own collection.

POLICY TOWARD CONSUMER HEALTH INFORMATION

Ms. Gartenfeld was asked to rank on a scale of one to five, with one as "most important" and five as "least important," network priority for nine activities. She gave top priority to consumer education and information acquisition and organization. Information referral rated a two and document delivery three. Information dissemination is not widely done, but focuses on local groups. Problem-solving was considered as an irrelevant activity for health service providers. The other three activities (lobbying, advocacy, and information interpretation/advice) were regarded as lowest priority (given a five).

PUBLICITY

The Raven report notes that each of the network's activities includes a promotional component as

> "a way of telling an audience that such a project existed. Within the network there were two consistent goals of the publicity program: 1) to inform members of the six communities that their local public library could now assist in meeting their health information needs; and 2) that Mount Auburn Hospital was assisting the public libraries in providing these services. These two goals were related to the Community Health Education Department's function of communicating to individuals in the ... area that the hospital cared about their health maintenance, as well as about treating them when they were ill."(8)

Publicity of the network and its services focuses on public appearances, the media, press releases, and advertisements appearing in local newspapers. Ms. Gartenfeld believes that substantial use of public libraries is generated from local newspaper and media coverage. Health education programs for the general public have publicized the ability of member libraries and the hospital to meet health related information needs. For example, brochures on the network and its objectives were mailed to over 5,000 health care providers (physicians, nurses, pharmacists, etc.) in the six communities. In addition, "a photographic exhibit publicizing the Network was

> "displayed at a shopping mall, at local high schools and in the main branch of each public library system. Information about CHIN was also sent to a variety of professional medical, nursing, education and library journals. This served the dual purpose of reaching local providers with information about the new resource and publicizing the project itself to both the library and health care worlds." (9)

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[8] *Ibid.*, p. 36.

[9] "A Community Information Network for Health Education," a Terminal Progress Report to the National Library of Medicine, grant #5G08LM03024. Cambridge: Mount Auburn Hospital, 1981. pp. 4-5.

The dissemination of materials through the publication programs, e.g., specially prepared bibliographics, publicizes the existence of the network. Most of these publications have been distributed free-of-charge; the network, however, has generated revenue through the sale of its union list and selected other titles. According to the Raven report,

> "CHIN's promotional activities were most successful when they centered around a particular program, the publication of new materials, or the introduction of new services. In each case the existence of some type of a "product" made publicity much easier, no matter what the intended audience. Difficulties arose in attempting to promote CHIN as an information resource available to a wide variety of users. The lack of an agreed-upon definition of health made it hard for library patrons to understand just what type of assistance they could expect. Providers often assumed that the services were for lay people, while consumers of health care were unclear just what services their libraries were prepared to provide. The necessarily, episodic nature of the network's promotional activities also limited its ability to make CHIN widely known in the six communities. This is not meant to suggest that library patrons did not know that they could now find information not formerly available, because they did. What they often did not know was that there was something called the Community Health Information Network which was largely responsible for the development and provision of these new services." (10)

INFORMATION TRANSFER AND NEW TECHNOLOGY

On-line searching provides access to information in the National Library of Medicine and other databases. The Watertown and Arlington public libraries have TELMED, which also provides needed information. Microcomputers and optical scanning devices will, Ms. Gartenfeld believes, make an impact on the provision of health information. These will undoubtedly be realities because the medical field offers a good return on investments.

ROLE OF PUBLIC LIBRARIES

Ms. Gartenfeld is concerned about the role of public libraries in the provision of consumer information services. She believes that these libraries should provide these services and that they should take advantage of networking. This means that they will have "to go beyond territoriality and provinciality" and approach the field of consumerism with imagination, while carving out a major role in the provision of information. Libraries should be an important provider of information, one which people should rely on more extensively. The potential for libraries in the area of consumer and health information services

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[10] Raven report, p. 38.

is "vast, but it requires a reordering of priorities to realize this and to take full advantage of this." Public libraries will have to be less passive and to reach out into areas that many of them have considered non-traditional and outside their sphere of operation. In this regard, Ms. Gartenfeld believes that with the financial constraints placed on many libraries, they "need to reach out in a program of information delivery, going well beyond I & R work." To do this, they must have a better perception of non-library providers and their potential relationship to libraries, as well as the barriers to change. It might be questioned why more libraries have not reached out to create cooperative programs, which offer something to the different partners?

Ms. Gartenfeld was presented with a list of activities and asked to rate on a scale of one to five, with one as "most important" and five as "least important," those which she believed libraries should be involved in for the area of consumer or health information services. She accorded top priority to advocacy (advocate the value of information for knowledge and decision making), information acquisition and organization, information dissemination, and information referral. Document delivery, consumer education, and lobbying all rated a two. Problem-solving was a three and information interpretation/advice a four.

CONCLUSION

CHIN involves a cooperative relationship between public and health sciences libraries in the provision of health information. It should be noted that:

> "Public libraries are able to deal with a wide variety and large number of users and are still the place where most consumers go to find information. The services health sciences libraries can best provide include in-service training for public librarians, reference back-up, assistance in collection development, and contact with providers willing to assist the public library in evaluation of materials. CHIN's experience indicates that what is needed for successful sharing of each library's skills and services is recognition of the need for such information and a commitment to providing it in a way that recognizes the strengths and limitations of each type of institution."

> "The ultimate purpose of the work done by the Community Health Information Network was to improve provider's access to quality information in the belief that this will result in better health care delivery and a healthier population. Though we cannot as yet prove that this has happened, the results of our data collection indicate that residents of our communities do have better access to the information they need both professionally and personally. The increasing

> requests from all types of providers for a wide variety of materials and services is further indication of the success of CHIN in meeting its stated objectives." (11)

The willingness of the six public libraries to continue their participation in CHIN in a time of financial hardship underscores the value of the network. Libraries can play a major role in providing information services to patients and other health care consumers.

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[11] "A Community Information Network for Health Education," p. 12.

WATERTOWN FREE PUBLIC LIBRARY, WATERTOWN, MASSACHUSETTS*

- MEMBER LIBRARY OF PROJECT CHIN -

The Watertown Free Public Library maintains the Watertown Information Line (WIL), an information and referral service, designed to assist community residents in finding the appropriate source provider for their information needs. Response to the service suggested the need to develop the library's capacity to address health care needs. In addition, the Watertown Multi-Service Center, which provides coordinated social services for the community, and the library observed the lack of medical care and information for residents, especially senior citizens. By cooperating on the production of a directory on health care, the Center and library became acutely aware of the need for health care information for the community. The willingness of Mount Auburn Hospital to create Project CHIN provided the basis from which to alleviate the critical shortage of available health care information. The success of the network makes library staff and community residents associate Mount Auburn Hospital with health care. Even if other hospitals in the community wanted to begin similar networks for public relations purposes, they might be reluctant to do so, because they would have to compete with a highly successful metwork.

THE NETWORK

The Watertown Free Public Library has been a member of the Community Health Information Network since its inception in 1977. In this capacity, the library can use the network and its facilities in providing health information to its users; the network makes available locally a level of sophisticated health care information. The target audience for the service includes the general public, library staff members, and health care professionals (e.g., medical students, nurses, pharmacists, paraprofessionals, and doctors). Some physicians refer their patients to the information contained in the collections. Library users, for example, might even disclose that their doctor referred them to the library for health care information. Consumer services, except on-line searching, are provided gratis. Users pay Mount Auburn directly for the cost of any on-line search.

Member libraries can draw upon core collections which the network helped to develop, consult each other, or refer to the network librarian or the librarian at Mount Auburn Hospital. Each library develops its collection in special areas for the common benefit of the whole network. The Watertown Free Public

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[*] The interview was conducted at the Watertown Free Public Library with Sigrid R. Reddy, Director; Helene Tuchman, Assistant Director and Community Services Librarian; and Jane Eastman, Supervisor of Adult Services and Head of Reference.

Library, for example, collects materials on death and dying, arthritis, and rheumatism. The creation of a union list of holdings enhances referral to other collections and interlibrary loan. Since the network librarian and the librarian at Mount Auburn Hospital work closely together, "we never felt there was a distinction between them."

The network provides reference service, interlibrary loan, collection evaluation and development, and programming. It produced a media guide containing the resources, as well as a list of recommended and not recommended diet books, evaluated by a group of health care professionals. Further, network staff members will evaluate new books for member libraries, prior to purchase, and verify the reliability of the information content. The network has also sponsored programs such as exercises for health and has held these in member libraries.

THE WATERTOWN FREE PUBLIC LIBRARY

The Watertown Free Public Library provides reference service for health information primarily by telephone and in-person; occasionally the service is provided by mail. Reference service is provided in both the central library and branches during regular business hours. The entire reference department (3.5 FTE) is involved in the provision of health care information. If the branches are included, the FTE becomes 6.0. Since the beginning of 1980, staff turnover in the reference department would be characterized as medium. Under Proposition 2-1/2, the loss of positions has been reflected in the reassignment of staff rather than by actual jobs lost. Reassignment necessitates further in-service training such as that provided by the network.

The CHIN program is extended to children in that the instructional media guide includes children's resources and involves the children's librarian. It should be noted that staff at the circulation and children's departments have been directed to refer health-related questions to the reference department. Providing for health care service absorbs one-half of one FTE; this encompasses ordering material, attending meetings, collection development, and reference service.

For providing health care services, the reference staff find books and journal articles most important (rated a one). Next in importance are government publications, excluding those of local government, and government agencies (rated a two), newsletters and personal contacts (a three), and trade publications (a four). Radio/TV spots and mailing lists are not considered useful.

GOALS

When asked their opinion about how well the network's goals are defined and communicated, the three librarians believe that the member libraries are fully aware (rated a one) and that consumers have access to health care information not readily available elsewhere. The librarians find that consumers are, indeed, aware of the network (rated a one), that the goals provide a workable framework for the daily operation of the network (rated a one), and that the network has developed plans to meet these goals. At the beginning of the reference interview, library patrons might mention that they "understand that the library has a way to get ahold of health care information." Staff members from network headquarters have helped member libraries meet the stated goals by visiting member libraries, examining collections on the basis of the local needs, evaluating collections, and maintaining a positive attitude toward the provision of health information.

The consensus of the group was that the goals are all practical and achievable. Further, they provide for in-service training, the regular interaction between the staff of network headquarters and member libraries, and the participation of member libraries in their formulation and refinement. Extensive meetings occurred between network headquarters and member libraries when they implemented the network. These meetings focussed on such topics as "are we qualified to discuss health care?" Initially, the Watertown Free Public Library sent three staff members for training. Now, six to eight people have received the training.

It might be noted that several years ago, one network goal attempted to involve public schools and their librarians in health care. An instructional media guide was produced to assist school librarians in the selection of appropriate resources. This program, however, was not successful because it was difficult to get the full cooperation of school librarians and school principals. The librarians could not always attend meetings during school hours, nor could they get the permission of principals to attend meetings.

Since CHIN no longer receives funding from the National Library of Medicine and the Library Services and Construction Act (LSCA), the member libraries are discovering that their collection of health care resources are becoming dated. They are, however, purchasing in this area to the best of their ability. Still, supplementary funding is necessary to maintain a current collection. The network will probably try to attract private funding. It may turn to private organizations and corporations, and away from the government. The perception is that money is available and that private groups require less rigid regulation than do government agencies.

Over the next two years, the network will probably also turn to increased publicity about the services provided by individual libraries and to in-service training. Some staff members from the libraries received their training some time ago and would benefit from an updating. Member libraries will continue to build upon the philosophy represented by CHIN and to meet the diverse information needs of their communities. Staff members at the Watertown Free Public Library, for example, have learned sign language and are purchasing large print equipment for the visually impaired. In brief, due to CHIN, the library is more aware of health care sources, what is available and useful, and does not neglect this area in collection development, reference service, and outreach programs. The library "has developed an attitude toward its role in providing consumer information to the public." It does not hesitate to meet information needs (e.g., through the provision of drug information) and to coordinate with other information providers. As one librarian interviewed noted, "To survive, public libraries must link with other information providers and offer the type of information services that the public wants."

POLICY

The three librarians were asked the priorities of their library with respect to nine activities associated with the network. The consensus was that information acquisition, organization, dissemination, and referral ranked at the top (a one). Document delivery received a two; consumer education and lobbying a three; and information/interpretation/advice a four. Advocacy and problem-solving were not important at all (a five). Interpretation/advice must be handled with care in the area of health information. It might be permissible on questions, for example, relating to medical terminology and dictionary definitions. Instead of engaging in problem-solving, the staff would refer clientele to an authority.

PUBLICITY

To publicize the health related services, the Watertown Free Public Library distributes the network brochures and flyers, has staff members speak before community groups, maintains contact with other information providers, and benefits from coverage in local newspapers. Programs sponsored by the library and the network also call attention to the services. For example, the children's department offers programs for parents while the children attend story hour. Of all these methods, local newspaper coverage is deemed the most effective. This is how people discover what has and will occur in the community.

THE FIVE CRITERIA

In providing health care information, the consensus was that the accuracy of the answer was the most important factor. The up-to-dateness of the answer and its understandability were ranked second and third respectively. Secondary factors were the time it took (fourth) and the cost in money (fifth). As the librarians interviewed explained, "this has been a 'free' service; we put in the time and the other equivalents for the benefit of our users."

As was noted, "the accuracy of consumer information, including referral, is our responsibility." People expect accurate information but also to be treated in a certain way. Even if they go to an institutional provider, such as a library, interpersonal contact is extremely important. The communication interchange may ultimately be more important than the information derived from printed sources. A drawback to the application of new technology might be that interpersonal interaction is neglected or slighted. People want this interaction and "it is extremely important that public libraries provide it." By identifying what is a good article or book, librarians play an important role in selecting from a mass of materials what is the most appropriate for a particular situation. The ability to discriminate among information resources saves clients time and prevents them from being overloaded with information.

New Technology

The greatest potential for new technology was seen in the area of home computers and cable television. Conceivably there might be a special health, diet, and nutrition channel. Further, there might be direct access between an individual at home or work and the source of the data. The Library is committed to placing the Watertown Information Line (WIL) on-line. Even though the library at present does not have the facilities to store and use the system on-line, it is still putting the file into machine-readable form.

USERS OF THE SERVICE

The library maintains a record of reference questions asked. As part of the grants from the National Library of Medicine, it had to maintain records about the users of the service. Since the expiration of the grants, such data are no longer gathered. There is no current evaluation process for determining the effectiveness of the service from the perspective of end users. The staff and the Board of Trustees believe that the network serves a useful purpose. The library director does not need to justify the service to the Board for continuing support. However, she noted that approximately five years ago, she had to demonstrate the value of information and referral services and the role of a library in this process. With the perceived success of the services and continuity among Board membership, the need for justification rarely arises.

User satisfaction with the service has not been determined on a formal basis. The consensus is that reference interviews must define the question and determine the source(s) that would answer that specific question. In this context, people may state their satisfaction. For example, they might say that "this is useful information" or "I did not know this information existed." In addition, interpersonal communication may have another benefit; talking about the problem or issue may make the person feel better.

As to specific measurable criteria, three were suggested. First of all, a number of people come back or are repeat users of the service. Secondly, the number of reference questions on health care has increased over time. Finally, there is increased referral from the community to the library for this service. People will actually mention that they "understand that we have this service."

CONCLUSION

Consumer information is a legitimate area for libraries to collect, organize, and disseminate. The general public needs information providers that will provide information and referral service. As was noted,

> "In today's world people often do not find the help they need, not because it is unavailable but because they don't know where to look for it. Until recently no central agency took the responsibility for locating certain kinds of information and making it accessible to the general public."

If libraries do not provide this service, some other agency will. Ms. Ready observed that "we must look at this in terms not only of survival but also to define the role of a library." Further, "libraries must decide what they exist for and how to use their resources best to achieve their goals." Proposition 2-1/2 and other cost-cutting measures should not be looked upon solely in terms of their implications on the physical plant. Librarians must also look at what shape their services will take and how best to carry out their programs. Libraries must identify the questions and concerns of the community and develop the necessary "outreach" programs. They need to obtain community support and to demonstrate their role as an important provider of information. According to Ms. Reddy, the area of consumer information services has mushroomed over recent years, and is one of vital importance to communities. There is a trememdous potential for libraries in this area, if they will only take advantage of it.

CASE 2

THE FREE LIBRARY OF PHILADELPHIA*

During the 1970s, the Free Library of Philadelphia began programs and services aimed specifically at consumers and their information needs. These efforts were all in response to the Library Services and Construction Act (LSCA) grants available through the State Library. The first LSCA grant, for $71,789, began in 1976 and was aimed broadly at providing consumer services. For this grant, the Library hired four part-time employees and charged them with the compilation of bibliographies for the fifty-two libraries within the system (three regional libraries and forty-nine branch libraries) as well as the gathering of pamphlets and free materials for distribution to the libraries within the system. The bibliographies covered topics such as the "Law and the Consumer," the "Deaf and the Consumer," and "Energy and the Consumer," they provided community residents with a basic, annotated reading list of books and pamphlets (government and non-government) available in the collections of most libraries within the system. A second grant, which was an extension of the first one, involved the gathering and dissemination of energy information.

With the termination of the LSCA grant covering energy services, the Library reapplied and received a new one-year grant for services to the hearing-impaired. A deaf coordinator was hired and a special telephone system was installed in the library, whereby the hearing-impaired could call in reference questions and receive answers through a teletype system connected to their home telephone. This service has continued past the termination of the grant, because financial support from private foundations has been available.

Another consumer service provided by the library relates to the Lifelong Learning Center, which provides career and education planning for adults. Again, it was established with a LSCA grant. Now that the grant has expired, free workshops pertaining to the selection and pursuit of career choices have been made possible through grants from B. Dalton Bookseller and the Free Library of Philadelphia Board of Trustees. These workshops cover topics such as skills identification, job seeking techniques, career resources, resume preparation. job interviewing, and stress management. The Center is now down to one staff member whose salary is paid by the Board of Trustees and operates on reduced hours (only on Wednesdays). Its main client group consists of displaced homemakers. Slide/tape presentations have been developed covering topics such as "Choosing an Occupation: Using the Resources of the Library," "Get Yourself Hired:

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*This report is based upon an interview with George Holloway, Head of Community Services, conducted on March 4, 1982.

The Job Interview," and "Women Entering and Re-Entering the Job Market." Each presentation lasts fifteen minutes and is available at various locations throughout the Library system for community residents to consult when the Center is not open. In addition, residents can take home a free workbook covering any of the topics.

Once each LSCA grant was terminated, alternative funding could not be found to maintain the same level of programming. The Free Library tried to maintain the "momentum" but has found this difficult given the budgetary situation. The hours that the Library is open have been cut, and over the last three years, more than 100 professional staff members have been released. The Library system is now down to 680 staff members and has had to terminate its bookmobile services. If supplementary funds become available, the hours of service would be extended and new staff members would be hired to reduce the work load of the present staff. It is unlikely, though, that funds would be used to initiate new services or to revitalize the consumer services.

In effect, the Free Library has retained its consumer services, but its commitment and ability to support these services is vastly reduced. It still tries to gather and distribute free source material through the system (e.g., bus schedules), to distribute a newsletter to system libraries ("Community Services Hotline") and to libraries and residents interested in energy-related matters ("Consumer Alert"), to update the reading lists on an on-demand basis, and to conduct workshops and film services. For example, system libraries might need access to a list of resources on nutrition. The old list, done with a LSCA grant, would be updated and distributed to the libraries. As for the newsletters, approximately 800 are run off and distributed to system libraries, where they can be posted or made available for clientele to photocopy.

An example of a well-attended workshop is one sponsored by the American Association of Retired People (AARP) and National Association of Retired Teachers (NRTA). Volunteers from the two associations were available in a branch library to help people complete income tax forms.

The Cooperative Extension Service, the Pennsylvania State University (1), holds seminars and workshops in the library system on topics such as money management and gardening. Copies of "Citygreen," the urban gardening newsletter of the Cooperative Extension Service, are also displayed in the library. It provides gardening information, how to obtain copies of gardening pamphlets, and a calendar of monthly events. Notices of activities sponsored by The Grassroots Alliance for a Solar Pennsylvania (Community Education Center, 3500 Lancaster Avenue,

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[1] The Cooperative Extension Service for Philadelphia County is located at S.E. Corner, Broad and Grange Streets, Philadelphia PA 19141.

Philadelphia, PA 19104) and other groups are posted in libraries throughout the system for community residents to check.

The libraries monitor community events and determine if there is need for a revised reading list, book displays, the distribution of free material, a program or workshop, etc. They then decide what they can do with limited staff and funds. It should be noted that:

> library branches select speakers and programs that meet the interest of the community in which they are located. The programs are presented individually or as a series. The programs are designed for library use or for presentation in conjunction with community groups. (2)

In regard to the consumer services, the Free Library of Philadelphia views as most important the acquisition and organization of information, information dissemination and referral, document delivery, and consumer education (all rated a one). All of the other activities (information interpretation/advice, advocacy, lobbying, and problem-solving) were not important (all rated a five on the five-point scale).

Although precise goals of the consumer information services are not currently available, it should be noted that libraries within the system are aware of the programs offered and what their clientele need (rated a one on the five-point scale). End users are less aware of the programs. However, there is great variation between regular library users and other residents of the community. The regular users are more likely to come into contact with programming and publicity. Taken together awareness of users and non-users might make for a three on the scale. The consumer programs reflect what the library system is trying to accomplish (a two) and the library system is meeting the goals to the best of its ability (a one) given the present level of funding and the number of available staff members.

THE ENERGY INFORMATION PROGRAM

Staff members assigned to the program acted as a clearinghouse and information resource for the library system, community agencies and groups within the city. They kept in touch with local agencies and consumer groups, and sent them copies of the newsletter "Consumer Alert." They also maintained a resource file of available speakers and organizations active in the field. In addition, there were programs such as Energy Fairs, special events and the publication of reading lists and bibliographies. There was even a live radio broadcast of a consumer advocate's daily talk show from the auditorium in the central library. Mr. George Holloway, head of Community

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[2] "The Free Library of Philadelphia's Energy Information Program," an unpublished paper of the Free Library, p. 3-4.

Services, frequently participated in the talk show and responded to questions about energy. Further,

> more than 50,000 EPA and FDA pieces of energy literature were distributed to lunch hour crowds at the Energy Fairs of 1979 and 1980 at John F. Kennedy Plaza. The Energy Fairs, now an annual event, are part of "Energy Awareness Week" sponsored by the Philadelphia Chamber of Commerce. Displays, including those of the Free Library were on exhibition at this heavily attended Center City landmark. (3)

PUBLICITY

Consumer-related activities and services are publicized through the two newsletters, the updated reading lists, alerting the community that the library has copies of bus schedules and other information in demand, slide/tape presentations on energy and career planning, as well as the distribution of a monthly calendar of events taking place in the library and of flyers and brochures announcing reading lists, programs, and the fact that the library contains information on a variety of topics. One brochure is aimed at new residents from other countries and explains that the library collects resources in their native language. These flyers and brochures comprise the most effective means of publicity. They are distributed through the libraries and occasionally given to community groups for dissemination. Some branch librarians even place copies in local stores for residents to pick up. This, however, is not done as much now as was in the past; the staff cuts have restricted the ability of librarians to reach out into the community. It might be noted that the library has a publicity office, which helps create the flyers and brochures.

Other effective publicity centers on word-of-mouth as well as coverage in local newspapers, radio, and television. Perhaps a member of the library staff might be invited to participate on a local talk show. Branch librarians might send press releases, flyers, and brochures to community newspapers and newsletters, in an effort to attract non-library users. Still, the flyers available within the branch libraries result in the community awareness of a program and the majority of people who take advantage of a particular program. Information about the effectiveness of a workshop or meeting is gathered from the type of evaluation form (see Figure 1).

User satisfaction is determined from the number of people who avail themselves of the service. In fact, many of them are repeat-users. There have been no recent efforts to analyze the consumer information services and their potential within the community. Publicity varies according to the attention given by

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[3] *Ibid.*, p. 7-8.

Figure 1. Program Evaluation Form

OFFICE OF WORK WITH ADULTS AND YOUNG ADULTS

THE FREE LIBRARY OF PHILADELPHIA

PROGRAM REPORTS

(or Report of Series)

Location of Program ____________________

Program Theme ______________ Date of Program(s) ______________

Purpose ____________________

____

Techniques used (Film Discussions, Illustated talk, etc.) ______________

____

____

Speaker ____________________

Cooperating Agency ____________________

Composition in audience ____________________

Number in audience (list for each program in series) ______________

____

Evaluation and Audience Reaction ____________________

____

____

How library materials were related ____________________

Estimated hours spent planning __________ execution __________ promoting _____

Publicity; Posters __________ Flyers __________ News Releases __________

Newspapers (attach avaliable copies) ____________________

Personal contacts ______________ other ______________

Comments; (Use reverse side if necessary) ____________________

____

____

(PLEASE ATTACH A

COPY OF THE FLYER)

Librarian ______________

Agency ______________

Date ______________

each library within the system. Variation as to the number of staff and their responsibilities has a definite impact on community awareness of a particular program.

THE FIVE CRITERIA

In relationship to information distributed to the libraries within the system (through the newsletters, reading lists, and free source material), the five factors are all of equal value (all rated a one). The information must be accurate, up-to-date, and easily understandable. Given the reduced number of professional staff members and their work load, the time it takes to compile or gather information becomes a critical consideration. The cost in terms of money is also crucial in that no LSCA, or other, funding is available. As already noted, if supplementary funding became available, it would be used to relieve staff workloads and not to revitalize consumer information services.

CONCLUSION

The Community Services Department of the Free Library of Philadelphia has responsibilities beyond consumer information services. It involves the library in a variety of activities such as film and speaker programs as well as special events. However, these programs are not covered here since they are not within the scope of this report.

Community Services assists libraries within the system in meeting the information needs of their clientele. Even with the staff cuts and budgetary restrictions, none of the system libraries have closed. In fact, members of the City Council would oppose any closing. Regarding a library as a "plum" for their community, Council members would prefer the creation of new libraries. However, money is not available for any expansion.

There are no plans to expand the consumer information services beyond the present level. The Free Library must look on its commitment to these services in relationship to the present number of staff and amount of the budget available. Still, it does not want to terminate these services, but to meet the needs of the community and system libraries the best that it can, by focusing on the maintenance of essential services. The consumer services are all aimed at the general public.

It is important that public libraries provide consumer information services. Often such services are not available elsewhere in the community. People look to libraries in Philadelphia primarily for leisure reading. Consumer information, it was noted, lends itself to such reading. Members of the library staff can go out into the community, gather needed source material, and make it available. Whenever necessary, librarians can compile or update bibliographies on topics such as health care and legal reference sources. In other communities, librarians can undertake additional responsibilities. The

Carnegie Library of Pittsburgh, for example, has begun a health care service, which provides referral to health agencies.

In conclusion, public libraries should concentrate, to the best of their abilities, on the acquisition and organization of information, information dissemination and referral, document delivery, and consumer education (all rated a one). Information interpretation/advice, advocacy, and problem-solving are unimportant activities (all rated a five on the five-point scale). In the future, lobbying will have to become more important (which is now rated a three), if libraries are to attract the necessary funding to provide a high level of community programming and services. Libraries must be aware of information needs, gather and disseminate available information, and publicize their role as information providers. Community residents must understand that public libraries gather the types of information they need/want.

CASE 3

NASSAU LIBRARY SYSTEM*

Long Island, New York, is a bastion of local government where communities maintain their individuality and autonomy. Public libraries in Nassau County reflect the same characteristics but recognize that cooperation can be advantageous. In this regard, they have designated the Nassau Library System (one of 22 public library systems through which state aid is channeled), located in Uniondale, as responsible for centralized book buying, collection development, consulting, publicity of library services, computerized services (e.g., payroll), cataloging, distribution of new acquisitions to member libraries, and backup services, including reference. In addition, the cooperative library system coordinates community services.

The desire to main local autonomy may conflict with resource sharing and other cooperative efforts. At times, the ensuing problems cannot be easily resolved. In such cases, dealing with autonomous libraries can be "frustrating and challenging," especially since the Nassau Library System serves in an advisory capacity. It cannot dictate policy to member libraries. Headquarters staff may have to promote new services and convince individual libraries about the potential value of these services.

Staff members of the Nassau Library System equate consumer services with their community programs. This report therefore confines itself to the community service programs which have as their goal "the development of the local library's role as a total Community Information Center, supplementing its traditionally perceived one as a keeper of the books." Community service programs enable public libraries "to be seen as a source of lifelong learning and a provider of job, educational, consumer, health and human service information to meet adults' living and learning needs for survival in an increasingly difficult social and economic environment."

When asked to rate, on a five point scale, the extent to which member libraries are aware of the goals for the community service programs, Ms. Puryear, the Adult Interagency Specialist for the library system, responded with a three. However, she noted that the libraries are more aware of some programs than they are of others. Community residents' awareness of these goals was rated 4. Nassau County contains a population of 1.321 million people (1980 census), many of whom are unaware of the various programs offered. Still, the Nassau Library System is trying to increase community awareness. She rated as a three the ability of the library system to achieve its goals. As she explained, "there is always room for improvement." The extent to which the library system has developed plans to meet these goals was rated as two. "We have developed plans but are not always as successful as we would like."

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*This report is based upon an interview with Dorothy Puryear (Adult Interagency Specialist, Nassau Library System) and Frank Santagata (Director, Information and Referral Service, Nassau County Health and Welfare Council) conducted January 12, 1982.

COMMUNITY SERVICE PROGRAMS

These programs involve the distribution of needed source material to member libraries and publicizing library system programs. The Nassau Library System prepares an "I & R Alert Series," which reprints newspaper articles and reports information that may be of interest to member libraries. Readers, for example, are alerted that New York State has free telephone hotlines to answer questions about food stamps and public assistance; that a state program inviting complaints about consumer problems was started at the Long Island Urban League, Hempstead; that The Gambling Problem Clinic at South Oaks Hospital, in Amityville, provides information on helping compulsive gamblers and their families; and that a free booklet "Small Claims Courts and Consumer Complaints" is available. The "Educational Update Series" provides a network of information about available educational programs in the county. Similar to the other series, it contains current information, which member libraries can post or place in vertical files.

Community services consist of the following components of the adult independent learner program:

- career counseling whereby professional counselors assist adults in making career decisions
- education and job information center providing job related information and assistance to the job seeker
- information to human services (information and referral function) linking people to the appropriate community service
- the learning connection providing a library-based referral service and bringing together people "who want to learn, teach, or share many kinds of educational and recreational information and activities"
- literacy and volunteer tutors serving on a one-to-one basis and working with adults who lack reading or writing skills

CAREER COUNSELING

Professional counselors are scheduled in ten public libraries on an appointment basis twelve hours per week. (1) They assist county residents wanting to explore career possibilities, requiring assistance in résumé preparation, or needing to learn the steps in planning a job campaign. The counselors serve under a coordinator, a professional counselor whose salary the first year was paid by Suffolk and Nassau libraries from their

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[1] These libraries are located in Farmingdale, Freeport, Glen Cove, Hempstead, Hicksville, Levittown, Long Beach, Oceanside, Port Washington, and Roslyn.

separate LSCA grant funds. (2) This Coordinator provides in-service training, supervises the counselors, and handles the evaluation.

LSCA funds have been used to reimburse individual libraries for the salaries of these counselors (requiring libraries to match with local dollars each dollar of LSCA counseling funds). It is hoped that at some point the libraries can absorb this cost. The counseling program is very popular; in nine months during 1981 some 1,800 people were counseled. Many counselors would like to apply for the part-time positions in the libraries. The majority of clients are suburban women (displaced homemakers) returning to the work force. The counseling program has enabled the libraries to develop their collections of career resources and to see increased circulation of these materials.

EDUCATION AND JOB INFORMATION CENTER

Located at the Hempstead Public Library, the Center provides job and education related resources. In addition, it offers advice and workshops on résumé writing, job interviewing, writing letters of resignation, assertiveness training, and job seeking strategies. County residents may even submit copies of their résumés for critiquing by library staff. The popularity of the Center is evident from the fact that for nine months during 1981 some 3,340 people received job information.

It might be noted that the Center received a Federal grant to show CETA workers how to use its resources. Further, a career counselor was assigned to work with them about employment possibilities and to ease their transition into the work force.

INFORMATION CONCERNING HUMAN SERVICES

As Adult Interagency Specialist, Ms. Puryear publicizes the Nassau Library System, makes other institutional, information providers aware of the library system, and seeks ways to coordinate library activities with those of other providers. She serves on a variety of non-library committees and sees that members of other information providers serve as advisory group members for library projects. These activities not only remind the community that libraries exist but also clarify their role. Libraries become aware of what is occurring in the community, and the community sees libraries as visible information disseminators, and as a source from which people can obtain information for themselves.

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[2] Suffolk can no longer afford to continue the program, and Nassau cannot afford to hire the coordinator on a full-time basis. Consequently next year, the coordinator will be hired on a contractual basis to fulfill specified tasks.

The Health and Welfare Council of Nassau County, Inc., provides an excellent example of the cooperative relationship that the Nassau Library System encourages. Supported by United Way (3) and contracts, the Council identifies human resources in the county and brings together relevant information providers, government and non-government service agencies. Their purpose is to make it easier for county residents to be aware of, and to gain access to, human services. To achieve this goal, the Council developed a machine-readable data base using the Lousiville taxonomy of family services and devised a listing of the 3,500 services offered by 540 human service agencies. This list, which has been placed on a disc for computer retrieval, is available on microfiche and computer printout. Further, it is updated every four months.

The Nassau Library System supports worthwhile efforts such as this directory by purchasing copies for distribution to member libraries. This subsidization permits the publication and distribution of services which might not otherwise be available to public libraries in the county, In order to make the microfiche taxonomy of services more useful, librarians from the system have prepared a companion index.

The Nassau Youth Services Directory (2nd edition, 1980), prepared by the National Council of Jewish Women, Nassau-Suffolk Area, "provides youth and their families, school personnel and all youth workers with the information needed to seek out the human services that help young people deal with the serious problems that most affect them today." The acknowledgements to this directory mention that "the Nassau Library System has helped to underwrite the cost of this Directory through purchase of quantities for distribution in the public libraries of Nassau County." Monies for such projects have come from LSCA funding, title 1 for adult independent learners.

The Nassau County Women's Services compiled a career resource file in collaboration with the public libraries in the county. This file lists, for example, the various educational programs of Hofstra University and the community services provided by the Nassau Library System. The library system underwrites the updating of the file and reproduces it for distribution to member libraries.

The Nassau Library System is also currently conducting a series of monthly seminars in which members of area agencies visit network headquarters and discuss their activities with public librarians. This discussion supplements the microfiche listing of human services produced by the Health and Welfare

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[3] The United Way wants to develop the ability of communities to provide information and referral activities. I & R has therefore become a key part of its fund raising.

Council and alerts agencies that libraries are community information centers. Agency staff also become more receptive to referral from libraries.

LEARNING CONNECTION

Modeled after the Learning Exchange in Chicago, the Learning Connection brings together people who want to teach or learn (e.g., how to weld, frost a cake, play a musical instrument, or speak a foreign language). Some participants are looking to meet people with similar interests. Some teachers want to exchange or barter their services while others prefer a modest fee. Whatever the arrangement, it is discussed in advance by both participants.

County residents register for the referral service in their local library. Precautions are taken to protect residents' rights and privacy. Library staff will disclose an individual's first name, telephone number, and special skills or needs. The initial contact is made by telephone and the first meeting occurs in a public place such as the public library. The student and teacher judge their compatibility and are not obligated to continue their connection beyond the first meeting.

The Learning Connection, which has been well received, has been written up in sources such as the New York Times and Newsday. Additional publicity includes television coverage and the placement of posters in Long Island railroads and the railroad stations. In some cases, out of gratitude, participants will authorize the library system to use their names and pictures for publicity purposes.

LITERACY AND VOLUNTEER TUTORS

One out of every five county residents cannot read; many non-English speaking residents want to pick up English as a second language. These people can apply to the adult independent learner program or the literacy program operated by the Hempstead Public Library. The Nassau Library System supports the Literacy Volunteers of Long Island, which trains tutors and assists county residents in developing reading and language skills.

CONCLUSION

The adult independent learner program emphasizes information acquisition, organization, dissemination, and referral; as well as document delivery, problem-solving, and consumer education. Library staff may even be engaged in information interpretation and advice. Lobbying and advocacy are less important; both would rate a three on a five-point scale. Staff members attempt to guide people through the maze of red tape without advocating a particular cause. After all, "they do not want to insult those people upon whom they depend for information."

The various services under the umbrella of the adult independent learner program are interrelated. For example, career counseling may place clients in contact with the Education and Job Information Center located in Hempstead. Library staff will refer county residents to the appropriate service, whether it is offered by another library or an outside agency. Due to the success of the adult independent learner program, community residents associate public libraries with a wide variety of their information needs, including those relating to vital decisions regarding career selection and job seeking.

The adult independent learner program, which is targeted to all segments of the general public, provides information and services for the adult regardless of that person's state of development or level of education. Over the next two years, the plans are not to initiate new programs but, rather, to institutionalize existing ones. For example, the Nassau Library System does not want member libraries to view career counseling and job information as "frills." These services have "proved themselves" and should be regarded as essential.

Since the number of Spanish speaking people in the county is increasing, the Nassau Library System will expand its bilingual services, using special Kellogg Foundation funds administered by the State Education Office in Albany. An increasing amount of source material prepared by the Education and Job Information Center, for example, needs to be translated into Spanish. Ms. Puryear noted that there is a paucity of bilingual librarians, that library schools should attempt to recruit Hispanics, and that more people planning careers in public librarianship should master a second language.

FUND ALLOCATION

Funding for the community service programs derives from Federal grants (LSCA), state grants (the N.Y. State Department of Education and its grant from the W.W. Kellogg Foundation), state funds (available on a per capita basis to operate the library system), county funding, and local funding (contributions by member libraries). The amount of LSCA grants that the Nassau Library System has received has declined over the past year and may cease in the near future. For this reason, staff members are trying to institutionalize programs and to make them self-supporting. Complicating their efforts is the fact that spiraling inflation is affecting member libraries. If the financial picture worsens, the library system may have to seek supplementary funding elsewhere -- perhaps from county or town government -- and try to ride out the crisis without cutting back on programs.

PUBLICITY

The Nassau Library System has experimented with a variety of methods for publicizing community services to the general public. With the assistance of outside groups, staff members have developed signs and posters, which were placed on local buses and elsewhere. These publicity efforts have drawn public attention to the specific program advertised and have been cost/beneficial. In some cases, the library system has been charged only for supplies; available space on the buses and graphics assistance were furnished free-of-charge.

The Nassau Library System gave the Learning Connection, which now contains 3,000 names, a birthday party. Staff members purchased a cake and arranged for Congressman Norman F. Lent, who at that time was running for reelection, to visit. The publicity created further awareness of community service programs.

News items have appeared in newspapers. Ms. Puryear maintains a scrapbook of such coverage. Publicity can also be generated by word-of-mouth, distribution of book marks and flyers, placement of staff members on the boards of community service agencies and organizations, and the selection of community leaders to serve on library advisory boards.

Working with volunteer organizations such as the National Council of Jewish Women, Nassau-Suffolk Area, generates effective publicity. The Nassau Library System underwrites the costs of producing source material by agreeing to purchase multiple copies for distribution to member libraries and the general public. News releases for the source material draws attention to the library system and may note its availability in area public libraries.

Network headquarters gathers copies of "News for the Consumer" (4) (see Appendix for specimen copy) for distribution to all member libraries every six weeks. These libraries can specify the number of copies that they want for public distribution. After the first year of distribution for this consumer's newsletter, the library system circulated a questionnaire to recipient libraries wanting to know if they wanted to continue the service. The finding was that they did; in fact, they requested additional copies for public distribution.

It might be noted that the Plainedge Public Library, Massapequa, New York, which is a member of the Nassau Library System, conducts a postcard survey of community residents wanting jobs and lists responding community residents, by job category, in a free newsletter, PERSonnel, distributed to local and area businesses. Prospective employers browse the newsletter and contact persons listed. This employment referral service has helped to make the public library an integral part of the community. The community is more willing to support the library and to investigate the variety of other services and programs offered.

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[4] This newletter is a publication of the Plainedge Public Library, Massapequa, New York 11758.

The same library maintains TIP (To Inform Plainedge), a service whereby it informs community residents about the receipt of information on a wide variety of topics, such as "energy conservation, home repair and maintenance, tax shelters, and interior decoration." Photocopies of information in specified categories will then be mailed to the interested resident. When the information is contained in a book or would require extensive photocopying, the resident would receive a postcard requesting him/her to pick up the requested material.

THE FIVE CRITERIA

Ms. Puryear was asked to rank the five factors according to overall importance. She believes that is is most important that community service programs provide up-to-date, current and accurate information, which is easily understandable by community residents. Equally important, members of the library system should be sensitive to the cost to individuals in getting the necessary information. Time becomes an important consideration when viewed in terms of reducing the length of information-gathering for consumers (also rated a "1"); however, it is unimportant when viewed in terms of librarian time to find requested information. The emphasis on understandability is evident given the need to provide source material to the Spanish speaking population.

EVALUATION

The Nassau Library System has the support of member libraries, human service agencies, and the community at large. Member libraries keep user statistics on the services they provide. For example, client evaluation sheets are completed for the career counseling program, and users of the job information center receive a postcard questionnaire. The return rate for the postcard survey is low; nonetheless, it suggests support for the service. Staff members from the Nassau Library System have queried member libraries about what they do with the "I & R Alert Series."

User satisfaction is also gauged from unsolicited responses (by telephone and letter) and from monitoring the number of repeat users. Staff members from the Nassau Library System, however, see a negative implication to using the number of repeat users as a measure of effectiveness. Perhaps, residents make repeated use of the job service, for example, because earlier use of the service did not produce the desired employment.

NEW TECHNOLOGY

New technology has potential application to the Nassau Library System, which is currently computerizing cataloging operations. The placement of computer terminals in member libraries will further efforts to create a union catalog. The Computer Based Educational Opportunity Center (CBEOC) has a data base covering educational programs for metropolitan New York. The

Nassau Library System is currently arranging for an acoustic coupler so that the Education and Job Information Center can retrieve financial aid and other information contained in this data base. It might be noted that the library system, at some point, would like "to tie into" the Health and Welfare Council and to exploit more fully its information files for the benefit of library users.

ROLE OF LIBRARIES IN PROVIDING CONSUMER INFORMATION SERVICES

Ms. Puryear believes that more public libraries should be engaged in activities similar to the adult independent learner program. These services represent an extension of the activities normally provided by libraries. Unless public libraries initiate such services in addition to the more traditional ones, they may not withstand competition from other information providers. Libraries must be relevant to the needs of the community if they expect to continue to receive a share of public tax support. They must help people with their survival and cannot justify the provision of services and financial expenditures to serve only "a few readers."

Ms. Puryear believes that if community residents regard the public library as essential for keeping them informed, they will vote the necessary financial support. Her concern, however, is that many libraries may not be demonstrating their relevancy and that other information providers may be filling the void. Consequently she questions if it is too late for many public libraries to be regarded as more than "keepers of the book" and to appeal to broad segments of the population.

APPENDIX

A SAMPLE COPY OF NEWS for the consUmer

PLAINEDGE
PUBLIC
LIBRARY

news
for the
consUmer

Number 49 MANAGING YOUR MONEY - PART V January 1981

INCOME TAX ORGANIZER

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Start now to organize your personal financial information - you'll have less work to do next year in preparing your federal income tax return. This report provides work sheets, explains terms, and refers you to sources of tax help.

The Value of Record Keeping

Tax time for many people ranks second only to New Year's Day as an occasion to make resolutions. Next year, you declare, you'll be more organized—no more sorting a year's accumulation of records or, worse, finding that you've kept few records at all.

A simple system for organizing will make your resolution easier to keep. This report offers the framework for such a system, one that you can build on to suit your particular needs. If you use it regularly this year, you'll have considerably less work to do at tax time next year.

You may not even have to file a federal income tax return if your income for the year falls below minimum levels. Beginning with tax year 1979, the filing requirements are increased to: $3,300 for single people and heads of households; $5,400 for married couples, both under 65 and filing jointly; $6,400 for married couples, if one spouse is 65 or over; $7,400 if both are 65 or over; and $1,000 for married people filing separately. You will have to file a return, however, to get a refund of any taxes withheld from your earnings.

BACKUP Good records do more than just make your work easier. They back up the figures you've entered on your tax form. If the Internal Revenue Service (IRS) questions the accuracy of your return, the burden is on you to prove your figures.

The most acceptable forms of proof are your records and actual receipts, such as sales slips, canceled checks, vouchers, and statements of earnings. If you can't back up your figures, by these or other means, the IRS will disallow your claim and you will pay more tax—and in some cases, penalties and interest.

STRATEGY A running record of your expenses can also help you foresee your probable reporting method for the year—for instance, if you'll be able to itemize deductions. As a rule, you are likely to benefit by itemizing your deductions if, during the tax year, you have paid large unreimbursed medical bills, property taxes, or interest on a home loan; if you have given large amounts to charity; or if you have had major casualty or theft losses.

You may also use the work sheets to help you time financial moves. You might, for example, see that this would be a good year to contribute the maximum allowable to your Individual Retirement Account.

WHAT TO KEEP In order to claim adjustments and itemized deductions you will need to keep track of a number of expenses. Some examples are:

Business Use of Your Car Keep the purchase agreement for the car; a log noting details of trips, such as mileage and the purpose of the visits; and receipts for such costs as gas, oil, repairs, license, and registration.

Charity Contributions You'll need receipts and canceled checks for cash gifts and a record of the fair market value of any property donated. You may also be able to deduct out-of-pocket expenses you paid (such as transportation costs) while working for charity, so keep those receipts, too.

Medical Bills Keep receipts for all professionals' fees, hospital charges, and medicine and drug purchases; for transportation expenses to and from medical care; and for health insurance premiums paid d reimbursements received.

Sales Tax If you're buying many costly items in one year (for instance, furnishing a home), you may exceed the deduction indicated in the sales tax tables for your income and family size. In that case, keep all slips showing sales tax paid.

HOW LONG TO KEEP You should keep records until the statute of limitations for the return expires—that is, three years from the date the return was filed or due, or two years from the date the tax was paid, whichever is later.

For your own benefit, you should keep certain records longer. If you think your income may increase sharply in the next few years, hold copies of your previous tax returns for at least five years so you can take advantage of income averaging if you're eligible. And keep records of any transaction involving your real estate or personal property until you sell or otherwise dispose of it; such records will be essential in backing up claims of casualty losses and capital gains and losses.

Using the Work Sheets

The work sheets will help you summarize the figures you collect throughout the year. They are not a substitute for the receipts themselves, and the IRS won't accept them in lieu of the original records.

HOW THEY WORK Use the left column of each work sheet to identify the sources of your figures. Under the heading "Wage/Salary/Commissions," for instance, fill in your employer's name; under "Interest," list your savings account number. Then when you pay your bills, and total the tax on the sales slips you've saved, enter the monthly amounts on the sheets.

From time to time you may want to see how your figures are measuring up to IRS requirements for, say, deductions—whether your expenses will qualify as deductible, what limits might apply, and the like. You'll find comprehensive information on this and many other tax matters in IRS Publication 17, *Your Federal Income Tax* (November 1979 edition). The discussions on Page 2 of this report are cross-referenced to Publication 17 for your convenience.

REFERENCE GUIDE

Here are some general guidelines, with references to IRS Publication 17 (November 1979 edition), to help you evaluate your personal financial data.

Income

Gross income for tax purposes means all income from any source except those specifically excluded by tax law (such as gifts and inheritances).

WAGE/SALARY/COMMISSIONS This includes bonuses, tips, income from side jobs, and certain "fringe benefits" (see Chapters 7-8). Your employer must give you, by Jan. 31, Form W-2 showing your total earnings for the year and the amounts withheld for taxes and other purposes. Beginning with the tax year 1979, you may also have to include as part of your taxable income a portion of the unemployment compensation paid to you, if your income (including the unemployment compensation) is over a certain amount (see Chapter 13). Attach a copy of your W-2 to your return. If you're paid on commission, you'll receive Form 1099-NEC.

INTEREST The bank or other institution that holds your savings account will send you, by Jan. 31, Form 1099-INT, showing your earned interest of $10 or more for the year (see Chapter 9).

DIVIDENDS You'll get a year-end statement of dividends paid to you either from your brokerage firm if it holds your stock, or directly from the issuing company if you hold the stock yourself. For ordinary dividends (paid from the earnings and profits of a corporation), the first $100 you receive from qualifying corporations is excluded from taxable income. If you file a joint return and you and your spouse each have dividend income of $100 or more, the total exclusion is $200 (see Chapter 10).

CAPITAL GAINS AND LOSSES A capital gain or loss is your profit or loss from the sale of a capital asset—generally, any property you own and use for investment. Your calculations will include the asset's original cost to you—adjusted by such factors as depreciation and improvement costs—and the amount you realized from the sale or exchange of the asset (see Chapter 26-32).

You must now hold an asset more than one year in order to get a tax break on the gain when you sell the asset. Beginning in 1979, you can exclude more of your profits from taxable income when you sell your property; generally, you are liable for taxes on only 40% of any gain made after Oct. 31, 1978. Two other new tax advantages apply to home sales made after July 26, 1978. Previously, law permitted you to defer tax on the gain from a sale—by reinvesting your gain in another principal residence of equal or greater value—only once in any 18-month period. Now, this time restriction is lifted if your moves are job-related and you qualify for the deduction for moving expenses. In addition, if you are 55 or older before you sell your home, and you owned and used your home for at least three of the five years ending on the date of the sale, you may choose to exclude from taxable income up to $100,000 of your gain. This exclusion is available to you only once.

PENSIONS At the end of the year, your pension fund trustee will send you copies of either (or both, if necessary) Form W-2P for pension and certain other periodic payments or Form 1099-R for lump-sum distributions. In addition, former employer(s) will send you annual statements breaking down benefits paid to you into taxable and nontaxable portions (see Chapter 12).

ALIMONY This is taxable as regular income (see Chapter 13). Child support payments are neither taxable if you receive them nor deductible if you pay them.

Adjustments

Adjustments are amounts that you subtract from your gross income. The remainder is called your adjusted gross income.

MOVING EXPENSES If your employer has reimbursed you for moving expenses, you'll receive Form 4782 (see Chapter 14). If you are not fully reimbursed, you must support your moving expense deduction on Form 3903.

IRA/KEOGH CONTRIBUTIONS The trustee of your account will send you, by Jan. 31, Form 5498 showing your total contributions for the year. For an Individual Retirement Account, you may deduct contributions up to 15% of your earnings, to a limit of $1,500 a year for your own account. The limit rises to $1,750 on accounts you establish for yourself and your unemployed spouse, with the total contribution divided evenly between the two—up to $875 to each IRA. You may contribute to your IRA until the date your tax return is due (including extensions). Excess contributions are subject to penalty tax; if you've made such contributions, you'll need to file Form 5329 (see Chapter 12). If you have a Keogh Plan, you may deduct contributions of up to 15% of your annual earnings, to a maximum of $7,500.

EMPLOYEES' BUSINESS EXPENSES If you have unreimbursed travel, entertainment, or gift expenses, you may be able to deduct these amounts. The travel expenses must be incurred while you are away from your home in pursuit of business. You may deduct unreimbursed travel expenses, even if you do not itemize deductions. Your unreimbursed expenses for entertainment and gifts may be deducted only if you itemize your deductions (see Chapter 15).

Deductions

Itemized deductions are amounts you subtract from your adjusted gross income when calculating your taxable income. The "zero bracket amount," which has replaced the standard deduction, applies to all taxpayers. You claim itemized deductions only to the extent that their total exceeds the zero bracket amount for your filing status. The zero bracket amount itself isn't actually deducted from your income. It's built into the tax tables, along with personal exemptions, to simplify your calculations (see Chapter 1). For 1979 and later years, the personal exemption and the zero bracket amount have been increased.

MEDICAL/DENTAL These expenses are deductible only to the extent that they exceed 3% of your adjusted gross income (see Chapter 19). The exception is health insurance premiums: You may deduct half the amount you pay for medical insurance, up to $150. Then you can add the balance of your premiums, if any, to your other medical expenses and deduct the total according to the 3% rule. Expenses for medicine and drugs are deductible only to the extent that they exceed 1% of adjusted gross income. Then, the excess is subject to the 3% rule discussed earlier. Remember to reduce your expense claims by the amount you were reimbursed through insurance.

TAXES You may deduct state and local real estate taxes, personal property taxes, income tax, and sales tax (see Chapter 20). Beginning in 1979, you can no longer take an itemized deduction for gasoline taxes.

INTEREST You may also deduct certain costs for your credit accounts. You'll get year-end statements of interest and finance charges paid on your home loan and bank credit card accounts. You may also get such statements on other loan accounts—for personal loans, car loans, etc.—either automatically or on request, depending on the lender. Many retailers also send annual statements, on request, to charge account customers (see Chapter 21).

EMPLOYEES' EDUCATIONAL EXPENSES You can deduct educational expenses if the education is required by law or by your employer in order to maintain your salary, status, or job. You can also deduct educational expenses that maintain or improve skills necessary to perform your job (see Chapter 24).

CASUALTY AND THEFT LOSSES You may deduct losses from damage to or theft of personal property (such as your home or car) and business property. You must reduce the amount of your loss by the amount of insurance compensation you receive. A loss on personal property is deductible only to the extent that it exceeds $100 for each casualty or theft (see Chapter 23).

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WRITE
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Number 49

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MANAGING YOUR MONEY - PART V

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SOURCES OF HELP

FROM YOUR PLAINEDGE PUBLIC LIBRARY -

TAX FORMS (Federal and State) will be available at your Plainedge Public Library. *(Use our machines to photocopy your retur*

TAX ASSISTANCE for SENIOR CITIZENS will be available at your Plainedge Public Library on Mondays, from 10 a.m. to 2 p.m starting February 16. Volunteers sponsored by the America Association of Retired Persons and the National Retired Teachers Association will be on hand to assist you, withou charge, through April 13.

TAX ASSISTANCE for ALL will be available at your Plainedge Publi Library through the Tax Assistance Program (TAP) which provides students from Hofstra University's Accounting Dept. free service will be offered on Thursday evenings from 7 to 9 p.m. and on Saturdays from 10 a.m. to 1 p.m. from February 7 through April 11.

TAX PUBLICATIONS including IRS and commercial guides such as Lasser's will be available for you to borrow from your Plainedge Public Library without charge.

FROM THE IRS - You may call 732-0100 for advice on figuring your taxes or for help with any other type of tax question. No record will be made of your identity unless you request a follow-up call from the IRS.

FROM THE STATE - Call 248-7250, an answering service, for any forms you need. Call 741-0950 if you have questions o need advice about your State taxes.

Credits

A credit is subtracted directly from the tax you ordinarily would owe, according to the tax table

CHILD DISABLED DEPENDENT CARE The credit is 20% of expenses, up to $400 credit a year for one dependent and up to $800 credit a year for two or more dependents. For 1979 and later years, you may be able to deduct payments made to your parents or your spouse's parents for child care (see Chapter 34).

POLITICAL CONTRIBUTIONS Beginning with tax year 1979, you must claim political contributions as a credit; you no longer have a choice to take them as a deduction. The maximum credit you can claim is $50 if you're single and $100 if you're filing jointly with your spouse (see Chapter 36).

ENERGY CONSERVATION If you install energy-saving devices or systems in your home between April 19, 1977 and Jan. 1, 1986, you can take a credit against your income tax. If you have installed energy-saving devices, such as insulation or storm windows, you may claim a credit of 15% of your expenses, to a maximum of $300 credit a year. If you have installed special energy systems, such as solar heating equipment, you may claim a credit of a percentage of your costs (30% of the first $2,000 and 20% of the next $8,000) to a maximum credit of $2,200. You can carry over any unused credits from one year to the next, through the 1987 tax year (see Chapter 36).

INCOME

Usual sources of taxable income.
For full information, see Chapters 7-13 and 26-32 of IRS Publication 17, *Your Federal Income Tax*

TYPE	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST
Wage/Salary/Commissions Gross amounts; do not exclude withholdings for taxes, FICA, etc.								
Tips Cash and value of noncash tips such as complimentary tickets and services.								
Interest From savings, loans, notes, certain bonds, credit union accounts, etc.								
Dividends Ordinary dividends (paid from the earnings and profits of a corporation).								
Capital Gains (Losses) Those from sale of home or personal property such as stocks, bonds, etc.								
Pension Amounts received from a company or government plan, IRA, Keogh, annuity.								
Alimony (received)								
Other (specify) Net rental income, jury duty payments, gambling winnings, unemployment compensation, excess reimbursem								

ADJUSTMENTS TO INCOME

These adjustments are used to determine your adjustec
For full information, see Chapters 14-18, Publication 17

Disability Pay								
Moving Costs								
IRA/Keogh Contribution								
Alimony (paid)								
Employees' Expenses								

s personal expenses may be deductible, to the extent that they exceed your zero bracket amount.
information, see Chapters 1 and 19-25 of IRS Publication 17 (November 1979 edition).

APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC	TOTAL

th insurance, transportation.

ts, etc.

s related to your salary or job status.

d business property.

ce expenses, and home office expenses.

subtracted directly from the tax you ordinarily would owe.
–37 of Publication 17 (November 1979 edition).

CASE 4

OCLC/CHANNEL 2000*

The CHANNEL 2000 Project, an experimental project focusing on a type of videotex system called viewdata, was an outgrowth of the OCLC Research Department's Home Delivery of Library Services Program initiated since June 1978. The Program investigated various developments of innovative systems offering library customers easy and inexpensive access to information.

Advances in computer and communication technology have offered many alternatives for remote electronic delivery of information whether for home use or for use in public locations such as airports, hotels, libraries, and supermarkets. CHANNEL 2000 essentially was an experimental project developed to test the technological feasibility of developing a viewdata system for delivery of information. It investigated the viability of an informational delivery method utilizing the switched telephone network to permit interaction with a computerized database, with retrieved information displayed on the screen of an ordinary television receiver. In addition, it also investigated the business market and social issues involved in electronic delivery of information using videotex technology.

Although the concept development of CHANNEL 2000 started in 1978, the actual proposal to the OCLC management was not submitted until November 1979. After the approval of the OCLC management was given, the system/service development began in February 1980 and the actual test was conducted in Columbus, Ohio during the last three months of 1980.

PROJECT OBJECTIVES

CHANNEL 2000 has the following objectives:

"- Develop and test a library electronic home information system
- Quantify potential user demand for and attitudes toward the system
- Identify additional information services for possible future implementation
- Evaluate the existing environment and potential competition
- Determine the social issues involved
- Examine the role of libraries in the evolving marketplace." (1)

---

*The interview was conducted on May 10, 1982 at the new OCLC building at Dublin, Ohio with Mr. Mark Bendig, Research Associate of the OCLC Research Department.

[1] CHANNEL 2000 Project Report. Columbus, OH, OCLC, April 1981.

CHANNEL 2000 PROJECT REPORT

This published report provides a detailed account on the development of CHANNEL 2000, the conduct of the test, the services offered by CHANNEL 2000, the user equipment, the host computer, the software, and the research procedures and results. Since this document is included as an Appendix in this report, only a few highlighted points from the summary need to be mentioned here:

- Test Sample Population

  Two hundred households were selected for the test. OCLC selected randomly 100 test households, while BANK ONE of Columbus, Ohio, which supported the project partially and which was interested in demonstrating banking services in the home by using viewtex technology, selected the other 100 households from among BANK ONE customers.

- User Equipment

  All test households were required to possess a television set and a telephone. OCLC then provided these households with a CHANNEL 2000 decoder and associated wiring used to connect the telephone and the TV set. An Installation Guide and a User Manual were included with each decoder.

- Services Offered

  CHANNEL 2000 offered an array of different types of information services, which included:

  - Video Catalog - A computerized version of the 300,000-record catalog of the Public Library of Columbus and Franklin County
  - Video Encyclopedia - 32,000-article Academic American Encyclopedia
  - Home Banking Services with BANK ONE
  - Public Information compiled by Com-tility
  - Columbus Regional Information/Community Calendar
  - Math That Counts } Developed by the College of
  - Early Reader } Education, Ohio State Univ.

CHANNEL 2000 AND THIS CONTRACTED PROJECT

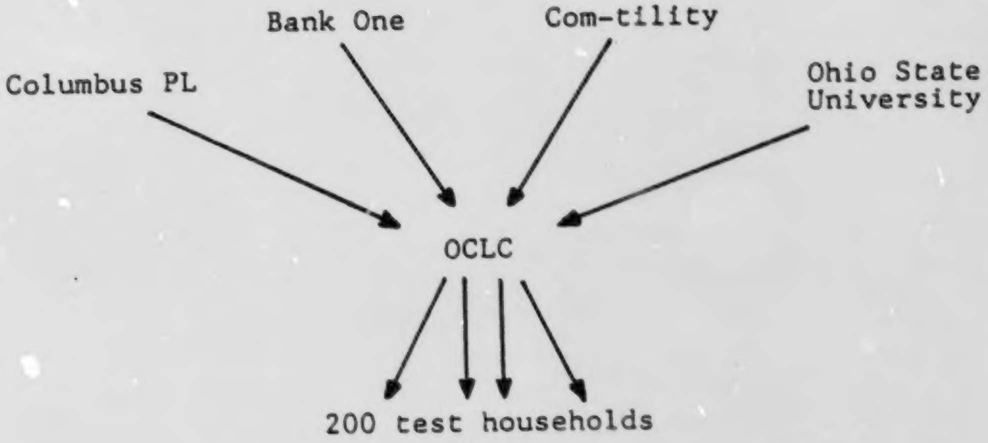
It is obvious from the above brief introduction, that CHANNEL 2000 is a very different kind of network as compared to those others chosen for this contracted project. It is not an existing network; rather, it is an experimental project which was chosen by our research team as one of the five library-related networks because of its use of new technology in electronic delivery of consumer related information. Thus, it is expected that many of the questions included in the standard Interview

Guide are not really applicable to CHANNEL 2000. For this reason, the interviewer took the opportunity, nonetheless, to explore with Mr. Bendig his personal views on those questioned areas.

RESPONSES TO INTERVIEW

NETWORK STRUCTURE

Channel 2000's network structure can be illustrated as follows:



NETWORK GOALS

As discussed earlier, CHANNEL 2000 had clear programmatic project objectives. It was a specific experimental project with information fed to OCLC through various information providers, such as the Public Library of Columbus and Franklin County and Com-tility, and delivered to 200 pre-selected test households. Thus, it was felt that all parties were involved in clear communication concerning the programmatic goals of such an experimental network.

CONSUMER INFORMATION SERVICES

One of the project's main objectives was to test the public's response to such a dramatic change in the form of information delivery. It was felt that consumer information should logically be provided by places such as libraries; however, little thought was given by the project staff to rationalize the importance of any given kind of consumer information.

Given the types of services provided by the CHANNEL 2000, as described in the introductory section, all except "Math That Counts" and "Early Reader" are or can be consumer related.

All of the services were supplied by OCLC, during the test period, free to test households via telephone lines. The services were available for almost 24 hours per day during the test period, and trouble lines were provided for troubleshooting. Although the databases which contain user-needed information were located at OCLC, the information needed by the user was available at the user's home through the electronic mode of information delivery. This deviates most substantially from the traditional mode of information provision.

Since CHANNEL 2000 was an experimental project, there has been no follow-up plan to mount further field tests of the system or pilot project. However, OCLC is currently pursuing technical enhancement to the system by developing and patenting its enhanced "VIEWTEL" (VIEWDATA PLUS VOICE).

FUNDING AND STAFFING

The CHANNEL 2000 was mainly supported by OCLC with approximately one-fifth of its $500,000 funded by the BANK ONE of Columbus, Ohio. During the period between February 1980 to December 1980, approximately an equivalent of 3 to 4 programmers and system analysts, together with an additional 3 clerical staff and computer technicians, were involved in the project. Almost all of the professionals were computer scientists with BS's and/or MS' in computer science. Staff members were mainly assigned to perform specific project related tasks based on matrix management techniques. Thus, the project staff were constantly changing.

IMPORTANT FACTORS IN PROVIDING CONSUMER INFORMATION SERVICES

Since CHANNEL 2000 was a technological project, it was felt that the most important factor was the "reliability of the system," followed by "ease of use of the system." All other factors listed in the Interview Guide -- cost in money and time, up-to-dateness, accuracy and understandability of the answers -- were considered to be equally important after the first two system considerations.

INFORMATION TRANSFER AND NEW TECHNOLOGY

CHANNEL 2000 has shown that viewdata can increase the availability of information to the general public. Its market analysis and project evaluation has pointed out great potential for electronic home delivery of information, and the challenges for the library to get out of its traditional role by providing library information outside its four walls. It has also revealed the related social and environmental issues affected by the development of viewdata. The enhanced "VIEWTEL" system points out even greater potential for librarians to communicate with their patrons through electronic means without having to ask the patrons to come to the library.

PROJECT EVALUATION

CHANNEL 2000 kept extensive statistics throughout the test for evaluation purposes. Data were collected in three ways:

1. Transaction logs - recording keystrokes of each user during the test;
2. Questionnaires - requesting demographics, life style, opinion leadership, attitudes and perceptions toward CHANNEL 2000 from each user before, during, and after the test period;
3. Six focus group interviews.

The focus group interviews were considered to be the most useful.

In addition to this, a doctoral dissertation by W.T. Bolton evaluated CHANNEL 2000. (2)

USER SATISFACTION

The three most important criteria used to determine the effectiveness of the service were:

1. Reliability of the system (this was a down-side factor for CHANNEL 2000);
2. Convenience to information seeker - instant availability of information at home. One does not have to go anywhere else for it;
3. Ease of use.

SPECULATION ON LIBRARY'S ROLE IN CONSUMER INFORMATION PROVISION

The library is considered to be the natural service agency to provide this type of service because of its community orientation and its persistent existence in every town in the country.

It should play the key role, "1," in consumer information acquisition and organization, dissemination, referral, and document delivery, problem-solving, information interpretation, and consumer education. But, it is generally not expected to be involved in advocacy and lobbying (as indicated by "5").

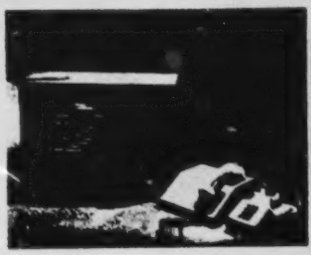
---

[2] William Theodore Bolton, Jr., The Perception and Potential Adoption of CHANNEL 2000: Implications for Diffusion Theory and Videotex Technology. Columbus, Ohio: The Ohio State University, 1981. Ph.D. Thesis.

CHANNEL 2000

A test of a viewdata system called CHANNEL 2000 was conducted by OCLC in Columbus, Ohio, during the last quarter of 1980. An outgrowth of the OCLC Research Department's Home Delivery of Library Services Program, CHANNEL 2000 was developed and tested to investigate technical, business, market, and social issues involved in electronic delivery of information using videotex technology.

Thomas D. Harnish
Project Manager



Role of Libraries

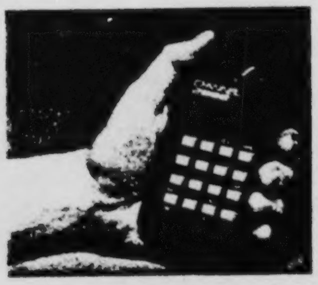
Libraries will play an increasingly dynamic role in meeting consumer demand for information. Libraries, focal points of information collection, organization, and dissemination in their communities, are moving toward delivery of services to patrons via electronics and computers. Broadcast and cable television programming, online data base access, personal computers, and even electronic games are currently offered by innovative libraries. Advances in computer and communications technology offer many alternatives for remote electronic delivery of information by libraries.

As consumers search for ways to secure more discretionary time, as a complex environment demands more informed decision-making, and as social change promotes immediate gratification, consumers will use services which best support their changing life-styles.

By meeting these changing needs, libraries can become a community resource in more and different ways than previously envisioned. While library effectiveness may be measured less in terms of patron visits and more in terms of viewdata system access, no overwhelming change in paper-medium-based services is envisioned for the near future.

As other businesses have found important advantages and opportunities offered by computers and telecommunications, libraries, too, are on the crest of a ground swell of technology that will help reduce costs and increase the availability of library resources. Cable- or telephone-based viewdata services will allow public access through libraries to electronic information in much the sam way as books, magazines, and other materials provide access to traditional sources of information. Whether librarie will face insurmountable competition from the commercial information industry or assume a new vital role as community information provider to local viewdata system remains to be seen.

Viewdata can become an important adjunct to traditional library services. It offers greater accessibility, more personalized service, and in so doing m promote a new recognition for the role of libraries.



Video Catalog
Browse through the videocard catalog of the Public Libraries of Columbus and Franklin County, and select books to be mailed directly to your home.

Video Encyclopedia
Locate any of 32,000 articles in the new Academic American Encyclopedia via one of three easy look-up indexes.

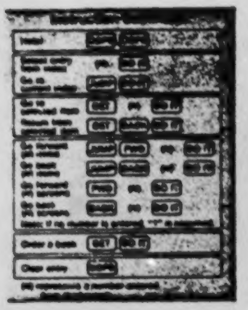
Home Banking
Pay your bills; check the status of your checking and savings accounts; look up the balance of your VISA credit card; look up your mortgage and installment loans; get current information on BANK ONE interest rates.

Public Information
Become aware of public and legislative information in Ohio.

Columbus Regional Information
Check the monthly calendar of events for local educational and entertainment happenings.

Math That Counts!
Teach your children basic mathematics, including counting and simple word problems.

Early Reader
Help your children learn to read by reinforcing word relationships.



System Use

At home, users attached the CHANNEL 2000 decoders to their own, unmodified television sets (much like attaching an electronic game). They switched the decoder from TV to CHANNEL 2000 and dialed the computer on their phone as instructed by a decoder-generated sign-on screen displayed on the TV. Upon hearing a high-pitched tone, users inserted the telephone handset in the decoder's acoustic-coupler cups. The decoder then automatically logged-on to the OCLC/CHANNEL 2000 host computer.

A "personal user" list of the names of household members, plus "guest" for visitors, was displayed by the computer. A number preceded each name on the list. The user pressed the corresponding number and the action key on the keypad to direct the computer to proceed. Next, the CHANNEL 2000 main index screen appeared.

The main index screen and subsequent index screens listed items, or categories of items, which could be viewed. An item of interest was selected by pressing the corresponding number. Information in the system was located by selecting items from sequential screens arranged in a hierarchical index structure or "menu-tree." A session was terminated by simply returning the phone to its cradle.

Data Collection

Throughout the test, data were collected in three ways. *Transaction logs* were maintained, recording keystrokes of each user during the test, thus allowing future analyses and reconstruction of the test sessions. *Questionnaires* requesting demographic, life-style, opinion leadership, and attitudes toward CHANNEL 2000 were collected from each user in each household before, during, and after the test. Six *focus-group interviews* were held and audio-taped to obtain specific user responses to the information services.

Attitudes Toward Library Services

Forty-six percent of the respondents agreed that CHANNEL 2000 saved their time getting books from the library. Responding to other questions, 29 percent felt that they would rather go to a traditional library than order books through CHANNEL 2000, and 38 percent of the users felt that CHANNEL 2000 had no effect on their library attendance.

Forty-one percent of the CHANNEL 2000 test group felt that their knowledge of library services increased as a result of the CHANNEL 2000 test. In addition, 16 percent of the respondents stated that they spent more time reading books than before the test.

Eighty-two percent of the respondents felt that public libraries should spend tax dollars on services such as CHANNEL 2000. Although this might suggest that library viewdata services should be tax-based, subsequent focus-group interviews indicated that remote use of these services should be paid for by the individual, whereas on-site use should be "free." Sixty-three percent of the test population stated that they would probably subscribe and pay for a viewdata library service, if the services were made available to them off-site.

Purchase Intent

As a final evaluation measure of the CHANNEL 2000 system, respondents were asked to rank order the seven CHANNEL 2000 services according to the likelihood that they would pay money to have that service in their home. A mean score was calculated for each CHANNEL 2000 service, and the following table shows rank order of preference.

Rank Order	CHANNEL 2000 Service
1	Video Encyclopedia
2	Video Catalog
3	Home Banking
4	Public Information
5	Columbus Calendar
6	Math That Counts
7	Early Reader

Behavioral Effects of CHANNEL 2000

Fifteen percent of the users felt that they spent less time watching television programming during the three-month test period. Eight percent of the respondents also indicated that they spent more time talking with their children as a result of having CHANNEL 2000. Statistical confidence cannot be attributed to these finds, although they may be indicative of a positive behavioral effect inherent in viewdata technology.

New Relevance

Community-oriented services are difficult for a large national viewdata system to provide. However, they lend themselves to the existing public library form. Public participation in library systems will increase only in proportion to the convenience of such participation. The substitution of communication for transportation provides an increased convenience sufficient to ensure more frequent selection of the library as a choice for satisfaction of information needs. Serious attempts to meet those needs will, in turn, ensure continuing relevance of libraries and their service.

New Beginnings

On behalf of libraries CHANNEL 2000 provided a first step: user attitudes and demands were assessed, additional services were identified, the existing technical and business environments were evaluated, and social issues were considered. The conclusions are positive. Libraries have an opportunity to play a plenary role in evolving viewdata services.

OCLC will continue to explore and assess this new medium and its value for libraries through Viewtel—an exciting new viewdata project under way at OCLC.

Viewtel

OCLC

6565 Frantz Road Dublin, Ohio 43017 (614) 764-6000

CHANNEL 2000

202

A test of a viewdata system called CHANNEL 2000 was conducted by OCLC in Columbus, Ohio, during the last quarter of 1980. An outgrowth of the OCLC Research Department's Home Delivery of Library Services Program, CHANNEL 2000 was developed and tested to investigate technical, business, market, and social issues involved in electronic delivery of information using videotex technology.

OCLC (Online Computer Library Center) is a not-for-profit library computer service and research organization based in Dublin, Ohio. The Center operates an international computer network that libraries use to acquire and catalog library materials, order custom-printed catalog cards, arrange interlibrary lending, and maintain location information on library materials.

The OCLC Research Department conducts mission-oriented research in all aspects of library and information science supporting both OCLC requirements and the broader needs of the library and information science community. Through this research, OCLC maintains its commitment to explore, study, and participate in technological advances in library and information science.

Thomas D. Harnish
Project Manager

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CHANNEL 2000

Description and Findings of a Viewdata Test Conducted by OCLC in Columbus, Ohio October-December 1980

Research Department
OCLC Online Computer Library Center, Incorporated
Dublin, Ohio 43017
USA

April 1981

Introduction

The CHANNEL 2000 Project focused on a type of videotex system called viewdata.

Viewdata systems generally use an internally modified or externally adapted television set to display text and graphics. The public telephone network is used to link the adapted TV set to computers and associated data bases providing a wide variety of information and services. Viewdata services are generally designed for personal use rather than for professional or academic use, and are paid for by the individual user, although business and school applications of viewdata systems are being tested. Relative ease of use and low cost are characteristics of viewdata systems that distinguish them from commercial timesharing or information retrieval services.

Similar but fundamentally different types of videotex systems known as teletext were not tested. With a teletext system, users can only capture a limited amount of information sequentially broadcast by the videotex system. With a viewdata system, users activate a host computer to satisfy their specific information needs.

Information services discussed in this report are referred to as Home Information Services. However, most of the services are also suitable for use in public locations such as airports, convention centers, dormitories, hotels, libraries, and government offices.

The CHANNEL 2000 Project Report is divided into three parts: A review of various facets of new consumer electronic information services, details of the CHANNEL 2000 videotex project, and findings and conclusions derived from the project.

Viewdata: An Evolving New Medium

Originally intended as simply another way of generating revenues from telephone systems, viewdata is evolving into a new means of distributing information. Ironically, developments suggest that extensive changes will be required if the public-switched telephone networks are to adequately meet technical requirements and consumer demand. Cable is becoming an attractive alternative as the number of homes with access to cable increases. Numerous systems have developed around the world.

Factors Supporting Development

Large-scale integrated circuits have been an impetus for viewdata. Low-cost high-speed components can now make electronic information available to consumers through systems that once were available only to technicians, scientists, and business people.

Economic factors have also had an impact. Inflation has increased labor costs and emphasized reduction of delivery costs. At the same time, an increasing number of two-paycheck families have more disposable income but less discretionary time.

Social change from a work ethic to a leisure ethic has led to a focus on self and increasing consumer demand for convenience. Future changes from an industrial economy to a service economy and from mass production to individualized production will create a favorable environment for new home information and entertainment services, in general, and viewdata in particular.

Information Seekers

Research into new product/service adoption has consistently shown that early adopters of a new product or service are different from those who adopt the innovation later. Early adopters, for example, have a need for information of all sorts; they seek information in newspapers and magazines, books and newsletters, radio and television, and in libraries. For them, viewdata will provide an "information window" to areas not readily accessed now. Through viewdata, the consumer of the 80s will eliminate many of the time-consuming activities associated with information-seeking. In our increasingly information-hungry society, consumer demand for convenience will be met by this new information medium.

Viewdata services will allow public access through libraries to electronic information.

Problems of Access

But this new information medium may create a new kind of poverty. Poverty is essentially a lack of options created by lack of financial resources, or a lack of options created by lack of informational resources. Will there be new federally funded programs for the informationally disadvantaged or an information stamp program to help maintain parity between the affluent informed early adopter and the rest of the population who have less convenient access to information?

Role of Libraries

Libraries will play an increasingly dynamic role in meeting consumer demand for information. Libraries, focal points of information collection, organization, and dissemination in their communities, are moving toward delivery of services to patrons via electronics and computers. Broadcast and cable television programming, online data base access, personal computers, and even electronic games are currently offered by innovative libraries. Advances in computer and communications technology offer many alternatives for remote electronic delivery of information by libraries.

As consumers search for ways to secure more discretionary time, as a complex environment demands more informed decision-making, and as social change promotes immediate gratification, consumers will use services which best support their changing life-styles.

By meeting these changing needs, libraries can become a community resource in more and different ways than previously envisioned. While library effectiveness may be measured less in terms of patron visits and more in terms of viewdata system access, no overwhelming change in paper-medium-based services is envisioned for the near future.

As other businesses have found important advantages and opportunities offered by computers and telecommunications, libraries, too, are on the crest of a ground swell of technology that will help reduce costs and increase the availability of library resources. Cable- or telephone-based viewdata services will allow public access through libraries to electronic information in much the same way as books, magazines, and other materials provide access to traditional sources of information. Whether libraries will face insurmountable competition from the commercial information industry or assume a new vital role as community information provider to local viewdata system remains to be seen.

Viewdata can become an important adjunct to traditional library services. It offers greater accessibility, more personalized service, and in so doing may promote a new recognition for the role of libraries.

Search for Solutions

Viewdata ostensibly differs from traditional computerized information systems in its ease of use. Yet, a small percentage of users report they are unable to locate information of interest. At the same time, a larger percentage complain that viewdata is actually too easy to use—simple to the point of inefficiency.

Manufacturers of low-cost TV adapters and special viewdata terminals are attempting to provide attractive and rugged devices with color and pictorial displays requiring sophisticated, costly technology. Innovative approaches to viewdata system design, each with inherent advantages and disadvantages, are being developed independently, with little compatibility.

Determining the essential mix of services necessary for success challenges information providers. Libraries, faced with a new medium for information collection, organization, and dissemination, ponder organizational and financial implications in an environment of change and tight budgets.

Regulation and standardization requirements will certainly impinge on future directions. The outcome of AT&T antitrust litigation and newspaper attempts to stop the Bell System's videotex developments will have a profound effect on the rate and direction of growth of viewdata. That viewdata/teletext decoders built into TV sets will be mandated by FCC regulation in the same way that UHF tuners are required seems unlikely in the near future. Nevertheless, some standardization will be required to permit interoperability of evolving systems and services.

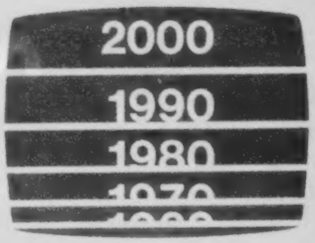
For the near term, more experimentation and development are likely around the world. Viewdata, as a concept, seems very attractive to consumers. But to succeed, it must be a service that meets a need at a reasonable price against competing systems, such as teletext and low-cost timesharing and information retrieval services. Entertainment systems, such as videodisc and videocassette, will also compete for disposable income among consumers in the prime-buyer group.

Promising Future

Viewdata devices that do not use a TV are appearing with costs below $300. Cable company add-on equipment is in the same price range, and various electronic games with videotex capabilities follow the decreasing price trend. Soon, it should be expected, some firms will give away terminals if consumers will buy their viewdata services.

By 1990 people will continue to communicate predominantly by telephone and receive entertainment from television. But electronic information will become a common consumer service available through private or public devices. Industries such as newspapers, broadcasting, merchandising, publishing, and electronics have demonstrated viewdata systems of their own or have made substantial investments to evaluate this rapidly developing technology. Estimates forecast widespread acceptance with more than $2 billion in service revenues generated by over 8 million households in 1985, expanding to $10 billion by 1990. How these services will evolve depends to a great extent on those who become involved today.

Electronic information will become a common consumer service.



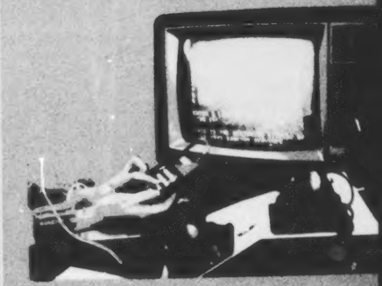
CHANNEL 2000 Project

Project Initiation

When OCLC was founded in 1967, one of its objectives was delivery of information to users when and where they want it. The *OCLC Annual Report* for 1968-69 described a development project that would someday provide remote access to computerized library catalogs—this at a time when large-scale remote access to computers was far from commercially feasible. By August 26, 1971, OCLC was offering libraries technical services through its own network; at that time commercial timesharing and telecommunications systems were in their infancy. OCLC quickly grew from a regional network to a national one, providing services to libraries in most of the states.

Home Delivery of Library Services

In 1977 OCLC established the Research Department to maintain its commitment to explore, study, and participate in technological advances in the field of library and information science. Since June 1978 the Research Department has conducted a series of investigations as part of the Home Delivery of Library Services Research Program. The program provides a comprehensive structure within which to investigate development of innovative systems offering library patrons (consumers) easy and inexpensive access to information. Research tasks are initiated as an outgrowth of three continuing projects: Technology Evaluation, Service Identification, and Market Analysis.



Then, in 1978, as OCLC expanded internationally, Frederick G. Kilgour, Founder and at that time President of OCLC, returned from a business trip to London with a *Times* article describing a TV-based information system called Viewdata.

Investigations were initiated to assess whether the viewdata concept could be integrated into the library setting. Early results of the Home Delivery of Library Services Research Program identified viewdata as a promising technology for libraries and library patrons. Research, syndicated studies, and a host of related development efforts around the world supported this finding. Meanwhile, through contacts and meetings with firms having viewdata interests in the United States, Canada, Japan, and Europe, OCLC staff found that:

1. No one seemed to think libraries had much to do with electronic information. ("They dealt just in books.")

2. Viewdata was essentially an easy-to-use timesharing computer service with a large data base.

The conclusion was that if OCLC and libraries wanted to understand viewdata, an in-house system would have to be (and could be) developed.

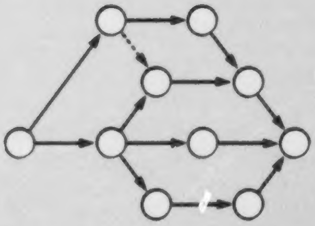
Proof of Concept Development

A design engineer from the OCLC Computer Facilities Division was assigned to build a prototype viewdata decoder (TV adapter) that could be connected to a standard television set. Concurrently, research staff developed retrieval software and a text-editor program for data entry. OCLC Library staff selected material for an online library catalog, and part of a consumer information catalog published by the U.S. Department of Commerce was edited for electronic use. Once the system became operational, two "enhanced capability" decoders were designed, built, and tested. Technically, an OCLC viewdata system seemed feasible. But operational feasibility could not be determined with prototype decoders and a few hundred screens of data.

Planning

Growing international interest in viewdata, and research and business prudence suggested a test of a more fully developed system that offered extensive information services. OCLC decided to seek outside funding from foundations or firms with an interest in viewdata and the broader field of home information services.

Meanwhile, appropriate information services were identified; potential information providers were located and contacted. At the same time, functional specifications were developed, computer and telecommunications support were sought both within OCLC and externally, and staff support requirements were estimated. A 100-household test was planned, and initial system development began.



BANK ONE of Columbus, Ohio, interested in demonstrating banking services in the home, approached OCLC regarding their participation as an information provider. Research and financial considerations supported an additional 100 households and offering limited home banking services. An agreement was reached whereby BANK ONE paid incremental costs for OCLC to develop special software for the banking service and in turn BANK ONE was allowed to select 100 participants in OCLC's 200-household test.

Project Objectives

On November 2, 1979, a proposal listing the following goals was submitted to OCLC management for approval:

- Develop and test a library electronic home information system
- Quantify potential user demand for and attitudes toward the system
- Identify additional information services for possible future implementation
- Evaluate the existing environment and potential competition
- Determine the social issues involved
- Examine the role of libraries in the evolving marketplace

A test in Columbus was planned for October, November, and December 1980 and system/service development began in February 1980.

Conduct of the Test

Selection

Two hundred households were selected for the test. Test participants were selected by two methods. OCLC selected 100 test households using a randomized quota selection procedure. BANK ONE selected 100 test households who were BANK ONE customers, based on the bank's belief that consumer reactions were predictable from other bank tests (such as tests of automated teller machines). Consequently, they chose associates, fellow bankers, bank employees, and senior management from allied firms for promotional reasons.

Training

Four one-hour briefing and training sessions were held (two in the bank's auditorium, two in a branch library activity room). A member of each test household attended one of the sessions and received a decoder with a keypad and associated wiring, an Installation Guide, and a User Manual.

System Use

At home, users attached the CHANNEL 2000 decoders to their own, unmodified television sets (much like attaching an electronic game). They switched the decoder from TV to CHANNEL 2000 and dialed the computer on their phone as instructed by a decoder-generated sign-on screen displayed on the TV. Upon hearing a high-pitched tone, users inserted the telephone handset in the decoder's acoustic-coupler cups. The decoder then automatically logged-on to the OCLC/CHANNEL 2000 host computer.

A "personal user" list of the names of household members, plus "guest" for visitors, was displayed by the computer. A number preceded each name on the list. The user pressed the corresponding number and the action key on the keypad to direct the computer to proceed. Next, the CHANNEL 2000 main index screen appeared.

Almost 2 million index and information screens were available.

The main index screen and subsequent index screens listed items, or categories of items, which could be viewed. An item of interest was selected by pressing the corresponding number. Information in the system was located by selecting items from sequential screens arranged in a hierarchical index structure or "menu-tree." A session was terminated by simply returning the phone to its cradle.

Data Collection

Throughout the test, data were collected in three ways. *Transaction logs* were maintained, recording keystrokes of each user during the test, thus allowing future analyses and reconstruction of the test sessions. *Questionnaires* requesting demographic, life-style, opinion leadership, and attitudes toward CHANNEL 2000 were collected from each user in each household before, during, and after the test. Six *focus-group interviews* were held and audio-taped to obtain specific user responses to the information services.

Services Offered

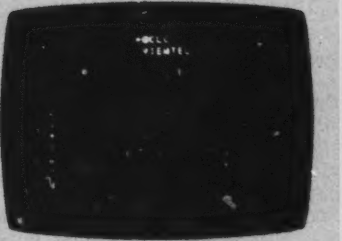
From earlier studies, it was apparent that the viability of a home information system is highly dependent on the services it offers. The user is not overly concerned with technology and equipment, but rather with "What will it do for me?" Except for the bank services, users were offered a collection of information services representative of those which might be offered through a library. Reference information was emphasized (typified by the online encyclopedia) as opposed to ephemeral information such as news, sports, and weather. Almost 2 million index and information screens were available.

The library catalog and encyclopedia data bases were created automatically (that is, by using special OCLC software) from machine-readable records provided by the Public Library of Columbus and Franklin County, Columbus, Ohio, and Arete Publishing Company, Princeton, New Jersey, respectively. Updating of the banking information on the OCLC CHANNEL 2000 computer was accomplished manually by BANK ONE, using OCLC software. Data for other services were entered manually by OCLC staff using text-editing software created by OCLC.

Library Catalog

The CHANNEL 2000 Library Catalog was a computerized version of the Public Library of Columbus and Franklin County (PLCFC) catalog. Data from the OCLC Online Union Catalog were processed along with tapes containing local data to create the "Video Catalog."

Users searched the catalog by author, title, or subject, and had access to any of 300,000 records ("videocards") corresponding to books and other materials held by the main library and its branches. Once the videocard for an item was displayed on the screen, a user could request the item via CHANNEL 2000. The library would respond by mailing the requested item(s) directly to the user's home. The similarity between this service and merchandise ordering from a commercial catalog is important.



Video Encyclopedia

The Video Encyclopedia contained the full text of the *Academic American Encyclopedia*, a 21-volume work published by Arete. The 32,000 articles varied in length from a single screen to over 300 screens of text (illustrations or graphics had to be omitted). Three separate indexes were provided:

1. An alphabetical list of article titles
2. A topic-subtopic hierarchy
3. An encyclopedia index citing occurrences of all subjects, keywords, names, places, and references

Public Information

The Public Information Service contained information about employment, environment, human services, parks, public utilities, sports, taxes, and voting eligibility in the Columbus/Franklin County area. This information was compiled by Com-tility, a local volunteer group acting as an umbrella information provider, drawing information from city, state, and private sources.

Community Calendar

The Community Calendar, compiled by the Columbus Regional Information Service (CRIS) of the Columbus Chamber of Commerce, provided a calendar of local education and entertainment events, and a guide to points of interest in Columbus. Ticket prices, times, and locations were provided.

Math That Counts

Math That Counts was one of two educational services developed by the College of Education (Early and Middle Childhood Education Department) at The Ohio State University. This service provided a variety of exercises for teaching children basic mathematics. Problem sets were grouped by grade level (kindergarten through sixth grade).

Early Reader

The Early Reader was the second educational service developed by OSU for inclusion in the test. The service, designed to help parents teach preschool children to read and to recognize word relationships, featured 14 single-screen rhymes, as well as instructions to parents on their use.

Home Banking

The Home Banking Service, developed by OCLC for BANK ONE, permitted users to perform a variety of financial transactions involving their own BANK ONE accounts. Users of the Home Banking Service could:

1. View their checking and savings account balances and transaction lists for the current or previous month
2. View current interest rates
3. Pay bills

A three-level security scheme designed by OCLC ensured privacy of personal financial information.

Special Features

To make the system easy to use, OCLC designed several special features into the system. Bookmark, electronic messages, browsing, and help screens were provided by CHANNEL 2000.

Bookmark. A user occasionally needed to terminate a session with CHANNEL 2000 before all desired information had been located. For example, studying a detailed encyclopedia article might be interrupted because someone wished to make a telephone call. The Bookmark feature simplified the process of returning to the particular article when the session was resumed. The main index screen offered Bookmark; upon selecting this item, the user was returned to the screen being viewed at the end of the previous session.

Electronic Messages. Future viewdata systems may offer electronic mail (user-to-user), thus providing communication services as well as information services. A limited version of such a mail facility was implemented on CHANNEL 2000. Mail could be sent by the OCLC research staff to any or all participants to announce new system features and periods of system unavailability due to maintenance. The Library (PLCFC) and OCLC used this system to send messages about book orders and banking.

Messages directed to a particular user were displayed when the user signed on to the system, prior to display of the main index. Messages could be addressed to individual users, households, groups of households, or to the entire system. No user-to-user communication was supported.

Browsing. Unlike newspapers and other similar printed matter, which can be scanned quickly, viewdata seems best suited to applications where the user knows exactly what is sought, and knows how to characterize or classify the desired information. Browsing, which is quite common in libraries, is not easily supported by a system designed to provide information on descriptive demand.

To simulate browsing capability, a limited scanning feature was incorporated into the CHANNEL 2000 system. The user was able, for example, to move from one encyclopedia article to the next (or any number of articles forward or back) without re-entering the encyclopedia index. Similarly, although a user may have sought a particular book by, say, title, once the book was located, other books by the same author could be viewed directly. This capability for scanning data screens was provided for all CHANNEL 2000 services.

Help. A means for assisting the user in conducting a CHANNEL 2000 session was considered important. In addition to the printed User Manual and a summary of available functions and commands printed on the back of the keypad, OCLC supplied an online help capability. When a user keyed in a request for help, a list of possible actions which could be taken at that time was displayed. Upon receipt of a help request, the system displayed the appropriate help screen(s). Return to the screen where help had been requested required only a simple keying sequence.

User Equipment

To be nonintrusive and compatible with existing life-styles, a home information service should, when possible, include equipment already found in the homes of potential users. This approach reduces the hardware expenditures required of the user (and/or system operator). The CHANNEL 2000 test required that the user possess a television set and a telephone meeting certain minimum specifications. The only additional pieces of equipment required were the CHANNEL 2000 decoder and associated wiring used to connect the telephone and the TV set. The resulting combination formed a home terminal suitable for the exchange of data with a remote computer. A *User Manual* and *Installation Guide* were provided.

Television Set

The CHANNEL 2000 system was expressly designed to utilize any color or black-and-white television receiver. No modifications to the TV were required. A television signal was generated by the decoder and transmitted via a connecting cable to the VHF antenna terminals of the TV set, tuned to CHANNEL 2, to display the generated image. Normal TV operation was maintained by connecting the user's TV antenna (or CATV feed) to the decoder, where a switching arrangement connected the antenna directly to the TV set when the decoder was not in use (decoder power switch in the OFF or TV position).

The external signal source (antenna or CATV feed) was disconnected by the decoder's internal switching arrangement when the decoder was in use (decoder power switch in the ON or CHANNEL 2000 position). All CHANNEL 2000 screen images originated within the decoder under control of the host computer and not with a local interactive cable television service, as many observers (and even some users) erroneously inferred.

Telephone

Communications between the decoder and the CHANNEL 2000 computer were conducted over ordinary telephone lines, using industry-standard tone-encoding techniques. Transmission in each direction was at a rate of 30 characters per second. An acoustic coupler arrangement was considered to be the least costly. After dialing the appropriate telephone number (using a standard dial or TouchTone™ telephone), the user placed the handset into two soft rubber cups on the decoder. The cups were spaced and shaped to accept a standard telephone handset (precluding use of Princess™, TrimLine™, or other kinds of telephones).

A consequence of using the telephone for communications was that the phone was busy during a CHANNEL 2000 session. People trying to call the household would, of course, receive a busy signal just as they would if the telephone were being used in the conventional manner.

Decoder

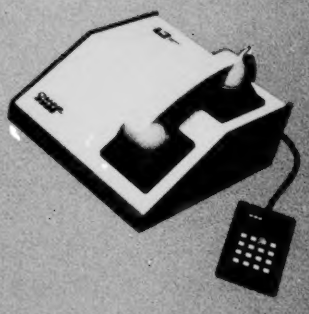
The decoder, consisting of a main chassis and an attached handheld keypad, was manufactured by Microcomputer Ventures, Inc., of Columbus, Ohio, to functional specifications provided by OCLC. Although the decoder was an experimental device, an attempt was made to make it aesthetically compatible with other furnishings. Each decoder contained a microcomputer for relaying user input from the keypad to the CHANNEL 2000 computer, and for displaying the resulting output on the TV screen. Although a limited graphics capability was built into the decoder, virtually all of the available screens contained only textual material, presented as white characters on a green or red background.

The 16-key keypad, designed for easy holding and use and connected to the decoder through a 25-ft cable, permitted the user to interact with the system from a customary TV viewing position. A summary of available commands and keystroke sequences was printed on the back of the keypad.

Documentation

An *Installation Guide* and a comprehensive *User Manual* were included with each decoder. The four-page *Installation Guide*, profusely illustrated with photographs, directed the user step by step through the process of connecting the decoder to the TV set. Several possible TV system configurations were covered (rabbit ears, CATV connection, VCR, video games, etc.) to ensure that each user could make the appropriate connections unassisted.

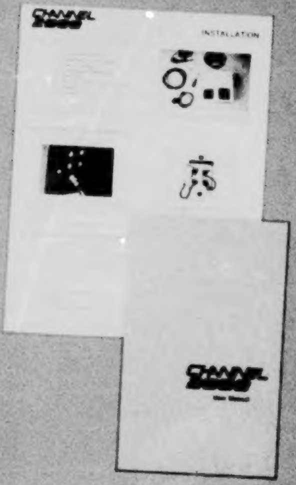
The *User Manual* provided detailed descriptions of all CHANNEL 2000 services and features, with representative examples of interactions. It also contained background information on OCLC and the various information providers participating in the test.



Host Computer

All CHANNEL 2000 computer operations were conducted through a dedicated system whose nucleus was a Xerox/Honeywell Sigma 7 central processing unit. This system included 512 kilobytes of main memory, 1.3 gigabytes of storage on 18 moving-head magnetic disk drives, and 56 telephone lines operating at 30 characters per second. Fifty of the lines were available for user access to CHANNEL 2000 services. The remaining six were reserved for staff use. Also supporting the system were a fixed-head magnetic disk, two 1600 bytes-per-inch magnetic tape drives, a high-speed line printer, and a teletypewriter.

The operating system controlling all operations was Xerox/Honeywell's Control Program-Five (CP-V). CHANNEL 2000 functioned as a normal timeshared program, making use of standard CP-V facilities for telecommunications and security.



Software

CHANNEL 2000 displayed requested information by means of two complementary computer programs—one in the Sigma 7 computer and one in the decoder.

Host Software

The Sigma 7 program, when started by the decoder program, checked the identification of the decoder and set up the appropriate telecommunications protocol for that device. It was then ready to interpret requests and do what was necessary to satisfy them. This program would transfer, from magnetic disk storage to the main memory, the information for each screen requested, then compose the screen and transmit it to the decoder.

Decoder Firmware

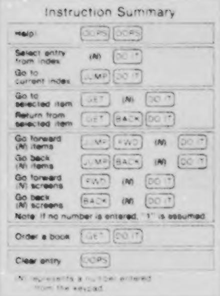
The decoder program performed several functions. First, when the decoder was turned on, it displayed a screen telling the user how to contact the main computer. Then it had to recognize when the telephone connection was made, and log-on to the Sigma 7 to start the CHANNEL 2000 program. From then on, the decoder program would display any information received from the CHANNEL 2000 computer. It would recognize, encode, and transmit to the computer any keystroke from the keypad. At the same time, this program was always looking for evidence that it had been disconnected. When the user hung up or was disconnected, the program would display a message screen to inform the user.

Command Language and Keypad

The command language (or the set of key sequences designed for requesting services) struck a compromise between ease of use and cost. A keypad with more keys probably would have been easier to use by some. A full alphanumeric keyboard would allow direct access to information by keywords and flexible phrasing of requests. Along with these benefits, though, a full keyboard would have brought the potential confusion of a more complex language and the concomitant requirement of more sophisticated (and costly) software to support it. In addition, the keyboard itself would have been more expensive.

A keypad similar to the CHANNEL 2000 keypad but with 24 to 30 keys would have allowed more satisfactory labeling of the keys, making them easier to use. But such a keypad would have to have been custom-made, thus increasing its cost. Keypads with only 16 keys are stock items, available in quantity at low cost. Less expensive 12-key pads are also readily available, but they have only two nondigit keys, dictating either a very restricted or a very cryptic, hard-to-use "language."

The 16-key pad permitted labeling six keys with words to make each request—there were eighteen types of requests—a short English-like statement. The OOPS key was provided for cancelling mistakes during key pressing and for requesting help (by pressing OOPS twice). The DO IT key was used to conclude each request. The remaining keys—digits 0-9 and the four keys GET, JUMP, FWD, and BACK—were used in combinations to specify different ways of going from one screen to another.



Instruction Summary

Help!	OOPS	OOPS		
Select entry from index	(N)	DO IT		
Go to current index	JUMP	DO IT		
Go to selected item	GET	(N)	DO IT	
Return from selected item	GET	BACK	DO IT	
Go forward (N) items	JUMP	FWD	(N)	DO IT
Go back (N) items	JUMP	BACK	(N)	DO IT
Go forward (N) screens	FWD	(N)	DO IT	
Go back (N) screens	BACK	(N)	DO IT	
Note: If no number is entered, "1" is assumed.				
Order a book	GET	DO IT		
Clear entry	OOPS			

(N) represents a number entered from the keypad.

The most important way of getting a new screen was to select an item on an index screen by keying the number of the item (followed always by DO IT). One could also return to an index by keying JUMP (followed by DO IT). Or, to go to the first screen of a major section of the CHANNEL 2000 information, one could refer to a printed list of the sections and their identifying numbers provided in the User Manual. Then, if the number listed were 9 (for example), the request GET 9 would immediately display the desired screen. To undo such a request (and also to return to normal activity after getting help) one would key GET BACK.

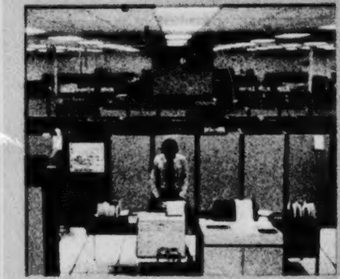
To see items that were adjacent or nearby in an index (that is, in another branch of the index "tree"), it was not necessary to return to the preceding index. For example, one could browse four items forward or back by keying JUMP FWD 4 or JUMP BACK 4. Simply JUMP FWD or JUMP BACK (without the number) would move one item forward or back.

Since many items filled more than one screen, the commands FWD and BACK were available to move to the next or the previous screen of an item. FWD 3 or BACK 3 would skip forward or back three screens of an item. The user could skip any number of screens at a time.

In addition to going from one screen to another, the users also performed other activities using the keypad. To request a book from the library, GET was keyed when viewing the videocard describing the book. The CHANNEL 2000 system would ask for confirmation of a request. Then the only acceptable answers were YES or NO, labels that were also placed on the FWD and BACK keys. To enter a personal identification number, an account number, or a dollar amount in the banking service, the digits (followed by DO IT) were keyed.

Transaction Log and Problem Detection
Like the decoder program, the Sigma 7 program constantly checked for disconnection and for serious problems. On discovering a serious problem the program would report it to both the user at home and the CHANNEL 2000 operations staff, and then disconnect. Any disconnection, whether intentional or accidental, caused the program to store a complete record of the session, in order to permit future research and to provide data for the Bookmark feature.

Security and Confidentiality
During banking operations, the program used extra measures to ensure security and confidentiality. A person's financial screens were released only upon verification of a personal identification number accepted only from that person's decoder. All financial screens were stored in a secure coded (encrypted) form.



Size
The main program occupied about 90 kilobytes of main memory and was not overlaid. One copy of the procedure could be shared by all concurrent users. Besides this main program, the CHANNEL 2000 system included several other programs, such as the two used by the library and the bank to satisfy transaction requests. Messages could be sent to individuals or groups by means of another program. Still other programs enabled the CHANNEL 2000 operations staff to monitor use of the system and to investigate problems. A number of programs were involved in creating and editing the large body of information stored on disk. In all, about 25,000 lines of code were written for CHANNEL 2000.

Research Procedures and Results

The CHANNEL 2000 test offered many unique research opportunities and challenges. Participants had the opportunity to examine and experiment with a viewdata service in their own homes. This educational process allowed them to form attitudes, opinions, and perceptions about viewdata services that were based on actual experience and not on speculation.

Sampling Procedures

Initial telephone contacts were made with a randomly selected group of over 3,000 Columbus residents. Individuals who agreed to cooperate and who had the necessary home equipment were sent a brief preliminary questionnaire designed to measure their innovativeness in the use of electronic products and to assess their demographic status. Based on these two indicators, a randomized quota sample of 100 households was chosen to participate. This sample was selected to ensure an equal distribution of high, medium, and low innovators, as well as a representative grouping of all age, income, education, and family-size categories. In addition, 100 households selected by BANK ONE participated in the test.

Data Collection

Test participants completed three extensive questionnaires. The first questionnaire was administered before the test so that initial reactions to viewdata technology could be obtained. The second questionnaire was administered three weeks after CHANNEL 2000 start-up in an effort to gauge early attitudes toward the system. The third questionnaire, administered after the test, was designed to measure concluding reactions to CHANNEL 2000, price elasticity, and potential demand for other viewdata services.

The three questionnaires included the following generalized variables:

1. Perceptions of the CHANNEL 2000 system along six separate dimensions
2. Product-specific life-style measures
3. Opinion leadership
4. Traditional library and banking use
5. Media use
6. Ease of use and usefulness of all CHANNEL 2000 services
7. Reactions to 26 hypothetical viewdata services
8. Pricing
9. Demographics
10. Several open-ended questions

Actual usage, keystroke by keystroke, of the CHANNEL 2000 system by each respondent over the three-month test was stored as a machine-readable transaction file at OCLC with user consent. Six focus-group interview sessions were held in mid-January 1981.

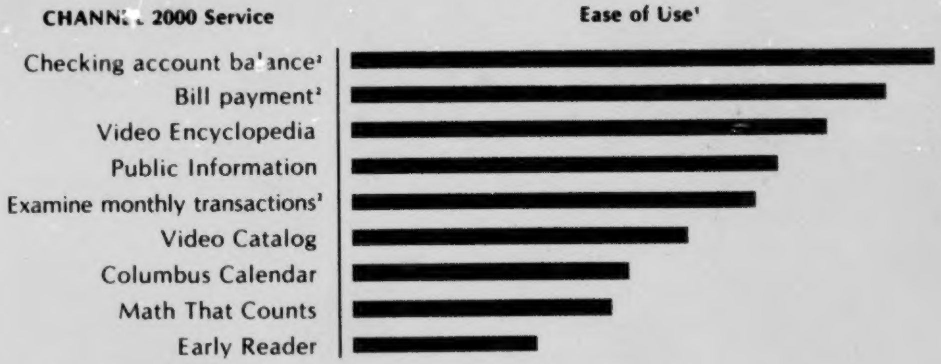
Evaluation of Results

The CHANNEL 2000 system, as tested, represented two primary design considerations: ease of use and low cost. These two factors predetermined the hardware and software configurations of the final CHANNEL 2000 system. The questionnaires, in turn, were designed to reflect upon the wisdom of this approach from a user's point of view.

Ease of Use

Several questions were designed to measure ease of use along two dimensions. One dimension related to how easy it was for users to operate the system. Respondents were asked to rate each of the six CHANNEL 2000 services (plus banking services for those who had this feature) according to a six-point scale, ranging from "very easy to use" to "very difficult to use." Video Encyclopedia, Public Information, and Banking Services were considered to be the easiest to use.

Ease-of-Use Mean Scores for CHANNEL 2000 Services



[1] Mean scores based on respondents' evaluations along a six-point scale ranging from 1 (very easy to use) to 6 (very difficult to use).

[2] Banking scores are based on a nonrandom sample of respondents.

Menu selection, although easy to use, was perceived as too slow.

Understanding

The second ease-of-use dimension related to how well the users understood CHANNEL 2000 operating procedures. If people understand how to operate a viewdata system, the degree to which they find it easy to use should be heightened. Eighty-five percent of the users either generally or definitely agreed with the statement "I understand how to operate CHANNEL 2000." Only 13 percent of the users felt they needed more instruction on how to use CHANNEL 2000; 18 percent of the users felt that they never did figure out how to use all of the CHANNEL 2000 commands. Fifty-eight percent of the user population felt that they understood the CHANNEL 2000 system well enough to always find what they wanted and only 4 percent reported that they thought they needed a lot of technical know-how to use CHANNEL 2000.

Installation

Eighty-nine percent of the users felt that CHANNEL 2000 was easy to connect. Most people agreed that CHANNEL 2000 did not clutter up their house, but 15 percent of the users felt that it was a problem. Over half the users felt strongly that CHANNEL 2000 should not involve their telephone. Two unexpected findings were that only 11 percent of the users felt that CHANNEL 2000 tied up their television too often (perhaps a result of the multiple TV set household) and only 13 percent of the users reported reading from the television set to be tiring.

Operations

Thirty-five percent of the sample either generally or definitely agreed that there were too many technical problems with CHANNEL 2000. In particular, 42 percent of those users reported that they were occasionally involuntarily disconnected from CHANNEL 2000. This experience certainly had an effect on how people evaluated the CHANNEL 2000 service and suggests that the overall evaluation of the CHANNEL 2000 service might have been even more favorable if these technical problems had not existed. Interestingly, 56 percent of the users who felt that CHANNEL 2000 was a poor system still said they felt the concept was good. Focus-group interviews reflected user recognition that the system was experimental and commercial services would be more reliable.

Consumer satisfaction with the keypad itself seemed to be high as indicated by 67 percent of the users agreeing that the keypad was very easy to use, and 63 percent agreeing that they had no difficulty using the instructions on the back of the CHANNEL 2000 keypad. But the menu-selection indexing method dictated by the simple keypad, although easy to use, was perceived as too slow.

Text display of 30 characters per second on the CHANNEL 2000 system was predicted to be too slow, but only 28 percent of the users indicated that this was the case. However, 34 percent of the users agreed that it took too much time to find a book or locate an encyclopedia article with the system, probably more a reflection on the menu-selection indexing used, than on data transmission rate. Twenty-eight percent of the users stated that it took too much time to complete their electronic banking activities via CHANNEL 2000; this was probably more a reflection on the bank's "back room" manual procedures than on bank system design. Home bill paying was heavily used.

Usefulness

Test participants were also asked how useful they found each of the CHANNEL 2000 services. Responses from users indicated that both the Video Catalog and the Public Information Service were considered to be the most useful CHANNEL 2000 services. Banking Services were next in line, followed by the Video Encyclopedia. Interestingly, Math That Counts received very heavy usage, probably because the service involved several learning games, although it was rated low in usefulness.

Purchase Intent

As a final evaluation measure of the CHANNEL 2000 system, respondents were asked to rank order the seven CHANNEL 2000 services according to the likelihood that they would pay money to have that service in their home. A mean score was calculated for each CHANNEL 2000 service, and the following table shows rank order of preference.

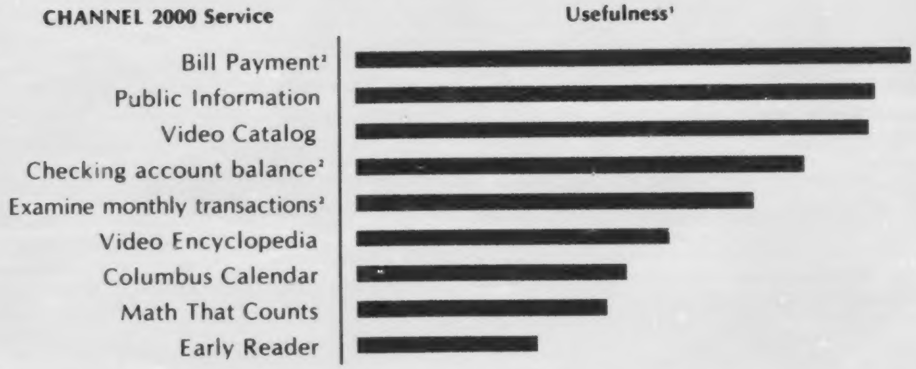
Rank Order	CHANNEL 2000 Service
1	Video Encyclopedia
2	Video Catalog
3	Home Banking
4	Public Information
5	Columbus Calendar
6	Math That Counts
7	Early Reader

Ideal Viewdata Services

One of the valuable aspects of this test was the "educational" process that the CHANNEL 2000 test population experienced. This viewdata learning experience allowed respondents to make informed determinations of the kinds of future viewdata services they might pay for.

To take advantage of this group of consumers' education, each CHANNEL 2000 user was presented a list of

Usefulness Mean Scores for CHANNEL 2000 Services



[1] Mean scores based on respondents' evaluations along a six-point scale ranging from 1 (very useful) to 6 (very useless).

[2] Banking scores are based on a nonrandom sample of respondents.

hypothetical viewdata services. Each user was asked to indicate on a five-point scale ranging from "definitely not" to "definitely would" their willingness to pay $3.00 per month for each viewdata service. Although the cost of $3.00 per month appears to be low for certain viewdata services, subsequent analysis of the data indicated that this value adequately provided a full range of positive and negative scores. The fact remains, however, that certain viewdata services are more of a bargain at $3.00 per month than others, and the reader is cautioned to keep this limitation in mind. The following table lists the top ten services in rank order of preference, as evaluated by the CHANNEL 2000 participants.

Rank Order	Hypothetical Viewdata Service
1	Home security
2	In-home computer
3	Video games
4	Library services
5	Catalog shopping
6	System that contacts doctor
7	Adult self-education
8	Encyclopedia
9	Household energy control
10	Bill payment

Home security is not a viewdata service, but may be provided using the same telecommunications system that delivers viewdata. Transactional capabilities (book ordering, bill paying) which bring "closure" to the information process, were frequently mentioned in the focus-group interviews.

Pricing

Other questions embedded in the three CHANNEL 2000 questionnaires related to prices that consumers would pay for viewdata services. Approximately 17 percent of the users indicated that they would be willing to pay between $10.00 and $15.00 per month for CHANNEL 2000 just as it was in its experimental state. Approximately 80 percent of the users indicated a moderate-to-high purchase probability at $15.00 per month for their six most desired hypothetical viewdata services. Some respondents to questionnaires and participants in focus groups said they would pay any price for the convenience offered by bill paying and book ordering. Naturally, purchase intent may overstate actual purchase behavior.

Some respondents said they would pay any price for the convenience.

Target Market

Findings confirmed what was expected from an analysis of consumer characteristics for an innovative electronic information service. People most interested in purchasing viewdata services tend to be young, well educated, and affluent. They seek stimulation through the acquisition of new products and ideas, and tend to participate in a variety of leisure activities. Their active schedules predispose them toward products that can save them time. They are "information hungry" and they are heavy library users. This target group owns the most electronic equipment and includes a high proportion of cable TV subscribers. In fact, cable subscription may be the best predictor of viewdata purchase. Automated teller machines (ATM), credit card use, and catalog shopping were highest in the target segment as well.

Cable subscription may be the best predictor of viewdata purchase.

Consumer Attitudes

Ninety-six percent of the test population felt the viewdata concept was a good idea, although roughly half were not overly impressed with CHANNEL 2000. Of those users who liked the viewdata concept, 43 percent indicated a high purchase potential for a similar commercial service.

Attitudes Toward Library Services

Forty-six percent of the respondents agreed that CHANNEL 2000 saved their time getting books from the library. Responding to other questions, 29 percent felt that they would rather go to a traditional library than order books through CHANNEL 2000, and 38 percent of the users felt that CHANNEL 2000 had no effect on their library attendance.

Forty-one percent of the CHANNEL 2000 test group felt that their knowledge of library services increased as a result of the CHANNEL 2000 test. In addition, 16 percent of the respondents stated that they spent more time reading books than before the test.

Eighty-two percent of the respondents felt that public libraries should spend tax dollars on services such as CHANNEL 2000.

Eighty-two percent of the respondents felt that public libraries should spend tax dollars on services such as CHANNEL 2000. Although this might suggest that library viewdata services should be tax-based, subsequent focus-group interviews indicated that remote use of these services should be paid for by the individual, whereas on-site use should be "free." Sixty-three percent of the test population stated that they would probably subscribe and pay for a viewdata library service, if the services were made available to them off-site.

Behavioral Effects of CHANNEL 2000

Fifteen percent of the users felt that they spent less time watching television programming during the three-month test period. Eight percent of the respondents also indicated that they spent more time talking with their children as a result of having CHANNEL 2000. Statistical confidence cannot be attributed to these finds, although they may be indicative of a positive behavioral effect inherent in viewdata technology.

Conclusions

Viewdata and the Future

The most sought-after answer among viewdata system operators today may be to the question: what is the essential mix of services required to stimulate purchase?

Strong user indications show convenience to be a partial answer. Transaction services (such as catalog shopping and bill paying) will be the foundation of successful viewdata businesses. Entertainment and home security repeatedly test well, but really are not within the definition of viewdata services. That these and other services may ultimately be offered by viewdata service providers seems inevitable, however.

Social consequences bear critical examination.

Communications and computers are the underpinnings of viewdata. Without them even the most seductive services are unusable. Consequently, system operator competition will be among the telephone companies, cable operators, and commercial timesharing companies. Competition among information providers will be strongest in areas with the least product differentiation—no great revelation in itself. Viewdata is a medium of broad scope and depth (almost by definition), the market will support a wide variety of information services once 10 to 15 percent penetration is reached.

From an environmental standpoint, regulatory and legal issues will affect diffusion of this innovation. Interoperability of systems will be crucial for the full potential of viewdata to be realized. Copyright, royalty, and privacy/confidentiality issues will be important and difficult to resolve, but probably will not slow system development.

Viewdata and Social Change

Social changes that may be effected by the development of viewdata are major and significant. Social impact will depend on decisions regarding the methods of distribution, pricing (and subsidizing), explicit control of access, and the nature of promotion of the new medium. Social consequences of such decisions therefore bear critical examination.

Styles of use of information may change significantly.

Availability of Information

Viewdata can increase the availability of information to the general public, whether the immediate source is a library or some other information provider. This presents opportunities for new approaches to general education for people of all ages. It also suggests an alternative to newspapers for the posting of public notices and other community information. At the same time, viewdata, like many other innovations in communication, will be most useful to people who already have considerable access to information. The methods of information selection, marketing, subsidizing, and pricing will have an influence on how great this differential in usefulness will be. Increasing the information gap could have serious societal consequences.

Rights and Needs of Users

Sources of information (authors, publishers, etc.) and users of transactional services must have control over distribution of their information. Until laws concerning viewdata mature, copyrights and with them the livelihoods of professional producers of some kinds of information may be in jeopardy. For providers of transactional services, there is a dual need: ensuring privacy and security, and convincing the users that their confidence is warranted. Government regulation will eventually fulfill the latter need, by setting standards for the former.

Long-term effects of everyday use of viewdata to satisfy a variety of information needs could not be determined in the timespan of the CHANNEL 2000 experiment. Conceivably, self-education, community awareness, and interpersonal communications at short range (say within the family or at work) will be affected, either positively or negatively, although no clear evidence of such an effect was observed. It seems likely that long-distance communication will be affected by the availability of a full electronic mail facility. Airlines are forecasting a 5 to 6 percent negative impact on travel by 1990. Overall styles of use of information may change significantly in conformity with the strengths and weaknesses of videotex. Such changes could have profound effects on our basic forms of social interaction.

The suggestion that libraries assume a role within this new distribution system has special appeal in light of these considerations.

Viewdata and Libraries

Libraries now stand on the threshold of great opportunities. Emerging electronic technologies provide the potential for a new age of community service in which the library can command new attention and financial support as an information resource serving the survival, growth, and recreational needs of Everyman. Despite their traditional conservative nature, even despite increasingly difficult economic conditions, libraries can achieve a leadership role in meeting individual information needs. Indeed there are those that predict libraries must do so in order to survive. Apocalyptic vision? Hyperbole? Perhaps. But the reality of today's world is change, increasingly rapid change. As its patrons accelerate into the future, libraries must as well. The alternative is irrelevance. And irrelevant institutions disappear.

New Medium

The library as an institution, was conceived in a simpler time, a time when the records of mankind were printed, physical entities to be transported from place to place, stored in rows on shelves, handed from person to person. It would be foolish to suggest that books and other forms of print-on-paper are doomed to extinction. Books and other materials will continue to serve as archival media for literature and records. However, print will play an ever-diminishing role in the generation and dissemination of "hot" ephemeral information, the continuously changing day-to-day information we rely on to live in our fast-paced society. Just as books and other direct-perception media are eminently suitable for long-term storage, computer systems, with their capabilities for rapid update and communication of information, prove ideal for serving topical, timely information needs.

Libraries have, of course, taken advantage of new technology (particularly computers) to an increasing degree in recent decades. If one looks closely, however, technology has been used to automate, simplify, or streamline existing services, rather than to provide strictly new services made possible by sophisticated machinery. Through computerized resource sharing, OCLC itself has brought about automation of a great deal of what was formerly tedious and expensive manual work.

New Opportunity

But where is an instance where computers have been used to extend and enhance service to patrons directly? And if few can be found, what is the reason? Certainly one reason is the crucial importance of being able to integrate innovations into the library setting. Could it be that the library has waited for the right system, at the right time? Could viewdata be, in fact, the right technology at the right time?

The importance of viewdata to the library may perhaps be best appreciated by considering the duality of function inherent in contemporary library operation: collection and reference. As used here, "collection" refers to the process of acquiring, organizing, and making available for use the accumulated records of mankind—the traditional library role in society. In the absence of the imminent development of systems permitting electronic delivery of entire book-length texts, one can conclude that the collection function is best served by existing forms (traditionalists take heart!). The book-on-shelf approach is as yet unthreatened in any real sense by developing technologies. True believers in "better living through technology" are best advised to examine the "reference" or information-providing function of the library. And there they find fertile ground for the seeds of change.

New Role

The earliest American public libraries (circa 1880) had no reference function at all as we understand it today. Indeed, the librarian who helped a patron locate a particular item was considered to be performing beyond the call of duty. Gradually, a subgroup—first called "special librarians," and then, "reference librarians"—emerged to satisfy growing public demand.

Over the years, the reference function has in some cases expanded to a point where it is as important as the collection function, which frequently serves in part to support the reference function. Has public perception tracked this broadened role? The answer is yes and no. Yes, the scholar and the frequent patron take advantage of the training and experience of the professional reference librarian, to use and appreciate this information resource. But no, for the citizen at large, in 1981, the library is probably not the information source of choice. The person who needs information may simply never consider the library. And those who do think of the library may not take the time to visit or call.

By bringing the reference function of the library directly into the patron's home, dormitory, or office via viewdata, the "energy barrier" associated with awareness and use of the library is removed. An enhanced viewdata system, perhaps in a hybrid form permitting patron access to extensive data bases, mediated by professional reference specialists, could in effect result in a "distributed library system."

New Relevance

Community-oriented services are difficult for a large national viewdata system to provide. However, they lend themselves to the existing public library form. Public participation in library systems will increase only in proportion to the convenience of such participation. The substitution of communication for transportation provides an increased convenience sufficient to ensure more frequent selection of the library as a choice for satisfaction of information needs. Serious attempts to meet those needs will, in turn, ensure continuing relevance of libraries and their service.

New Beginnings

On behalf of libraries CHANNEL 2000 provided a first step: user attitudes and demands were assessed, additional services were identified, the existing technical and business environments were evaluated, and social issues were considered. The conclusions are positive. Libraries have an opportunity to play a plenary role in evolving viewdata services.

OCLC will continue to explore and assess this new medium and its value for libraries through Viewtel—an exciting new viewdata project under way at OCLC.

The book-on-shelf approach is as yet unthreatened.

Libraries have an opportunity to play a plenary role in evolving viewdata services.

Viewtel

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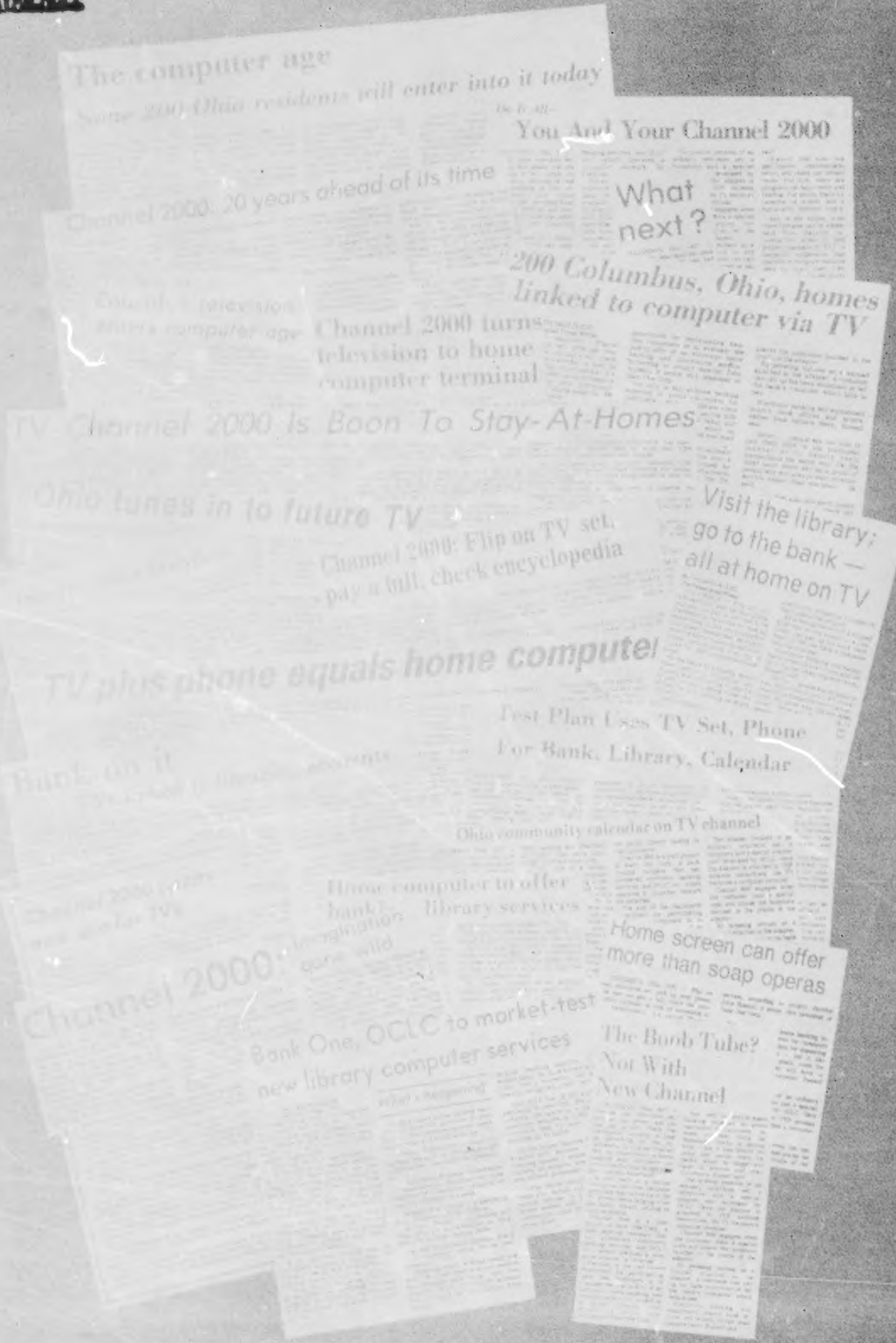

The computer age

Some 200 Ohio residents will enter into it today

You And Your Channel 2000

What next?

Channel 2000: 20 years ahead of its time

200 Columbus, Ohio, homes linked to computer via TV

Columbus television enters computer age

Channel 2000 turns television to home computer terminal

TV Channel 2000 Is Boon To Stay-At-Homes

Ohio tunes in to future TV

Channel 2000: Flip on TV set, pay a bill, check encyclopedia

Visit the library; go to the bank — all at home on TV

TV plus phone equals home computer

Test Plan Uses TV Set, Phone For Bank, Library, Calendar

Bank on it

Ohio community calendar on TV channel

Home computer to offer bank, library services

Home screen can offer more than soap operas

Channel 2000: imagination gone wild

Bank One, OCLC to market-test new library computer services

The Boob Tube? Not With New Channel

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Information Providers

Frank Greenagel
Academic American Encyclopedia
101 College Road East
Princeton, NJ 08540

John Fisher
Bank One of Columbus
100 East Broad Street
Columbus, OH 43215

Lauri Zofan
Columbus Regional Information Service
Columbus Area Chamber of Commerce
37 North High Street
Columbus, OH 43215

Celianna Taylor
Computer Utility for Public Information
P.O. Box 3244
University Station
Columbus, OH 43210

Marlin Languis
Early and Middle Childhood Education
College of Education
The Ohio State University
Columbus, OH 43210

Richard Sweeney
Public Library of Columbus and Franklin County
28 South Hamilton Road
Columbus, OH 43213

PUBLIC LIBRARY OF COLUMBUS & FRANKLIN COUNTY*

The Public Library of Columbus & Franklin County (PLCFC) was interviewed because of its involvement with the OCLC's CHANNEL 2000 Project. As described in the interview report on CHANNEL 2000, since the project was an experimental one and the network was never in operational mode, many of the questions included in the Interview Guide were not pertinent to this interview. However, since the PLCFC has had many innovative projects related to the use of new technology, and many more are being planned, the interviewer took the opportunity to explore with Mr. Richard Sweeney his personal views on many of the questions asked in the Interview Guide.

RELATIONSHIP WITH CHANNEL 2000

The respondent, Mr. Sweeney, was involved at the early conceptual phase of CHANNEL 2000 in early 1979 when CHANNEL 2000's project director, Thomas D. Harnish, read one of Sweeney's articles discussing the future of home information delivery. Mr. Sweeney left Michigan and became director of the PLCFC later that year when CHANNEL 2000 began to start its system development phase. Since the PLCFC's 300,000 volume card catalog was available in machine-readable form at that time, it was natural that the library would become one of the important information providers for OCLC's CHANNEL 2000.

The PLCFC provided its machine-readable catalog information to OCLC which, in turn, transmitted the library catalog information to those from the 200 test households which requested the information. In a sense, OCLC's CHANNEL 2000 served as a switching station. It was felt, however, that the interaction between OCLC and PLCFC could have been better. Because of the minimum interaction between them, OCLC could not benefit from the librarians at the PLCFC during database construction phase.

Since CHANNEL 2000 was an experimental project, it was felt, from the information provider's point of view, that the goals of the project were well communicated among network members. As to the questions relating to the extent to which project goals were achieved, it was pointed out that the chicken and egg problem did exist. Viewtext technology should deal with a very dynamic file which is constantly changing and being updated. Yet, CHANNEL 2000's databases were pre-determined, and some were quite limited in size. For example, the Community Calendar information file was at least three months old by the end of the test period; thus, the value of the information provided to the seekers was greatly decreased.

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*The interview was conducted on May 11, 1982, at the PLCFC, Columbus, OH with Director Richard Sweeney.

GOALS FOR CONSUMER INFORMATION SERVICE

Basically, the role of the public library, according to Mr. Sweeney is to provide information utility to end-users free of charge. In other words, information such as bus schedules, a news index, League of Women Voters activities, and information on conventions should be delivered to end users through one mechanism. These types of information are mutually owned and funded by several organizations, yet can be coordinated by the public library for dissemination purposes. Thus, the library is serving as a central switching mechanism for information access.

The library can best deal with free information utility. Mr. Sweeney believes that the library should not be heavily involved with the provision of that consumer information which should be paid for, such as sales information of appliances in large metropolitan cities. Instead, he thinks that this latter type of information provision should be provided through commercial channels.

TESTING PERIOD

During the 3-month testing period, October-December 1980, the PLCFC had one CHANNEL 2000 terminal in the library for the entire period, and it was available for the use of library patrons during all library hours. Incidentally, one of the library staff was randomly selected by CHANNEL 2000 as one of the test households.

PLCFC'S RESPONSIBILITY

The PLCFC also provided automatic book borrowing services to those people from the test households during the test period. That was an extremely successful operation, which generated much greater library book borrowing for those who had been infrequent library users. As expected, the services consumed a great deal of staff time. Thus, as the experiment went on, it was necessary for the library to place a restriction on automatic book borrowing (nine books per user per request from home).

POLICY RELATED TO CONSUMER INFORMATION SERVICES

The respondent felt strongly that a library consumer information network should consider the following as its primary activities:

- Information acquisition and organization
- Information dissemination
- Information referral
- Document delivery

Since the library's role is to provide information from all points of view, then on the scale of "1" to "5", with "5" as the least important, the respondent ranked the other 5 activities in the following way:

Consumer education	3
Information interpretation/advice	4
Advocacy	4
Lobbying	5
Problem-solving	5

PUBLICITY OF CONSUMER SERVICES

The PLCFC utilizes a combination of publicity means to advertise its consumer information services. These means are:

- Direct mailing of brochures
- Business newsletters
- Radio, TV

Of these, direct mailing has been found to be most effective.

CONSUMER INFORMATION SERVICES - PRESENT AND FORTHCOMING

Presently the PLCFC offers over 100 educational programs on practical consumer topics such as car servicing and microcomputer programming. It is expected that in the next two years, new network activities will be provided in two areas:

- Ready reference network
- Remote searching assistance

It is also expected that in the future, new technology will be applied to the following new projects:

- Literacy project with the use of videodisc, microcomputers, and audio systems
- Interactive cable TV programs which will discuss books on various subjects

All of these new projects are to be initiated in line with the information utility concept as discussed earlier.

CONSUMER INFORMATION SOURCES

In providing consumer information services, types of information sources were ranked in the following order in terms of their importance and usefulness, with "1" as "most useful":

Journal publications	1
Personal contacts	1
Book publications	2
Newsletters	2
Trade publications	3
Mailing lists from agencies	3
Government publications	3
Government agencies	3
Radio/TV spots	4

CRITERIA FOR CONSUMER INFORMATION PROVISION

It was felt by the respondent that all five factors mentioned - cost in money, cost in time, up-to-dateness of information, accuracy of answer, and understandability of answer - were equally important.

FUNDING

All existing projects are supported by the library's operating budget. However, grant funding will be solicited for new projects such as the literacy project.

USERS OF CONSUMER INFORMATION SERVICES AT THE PLCFC

The library has regularly conducted professional market surveys about 6 months prior to the annual tax levy time. On-going community analyses have been conducted on focus groups by the library staff as well.

As a result of these studies, a proposal for reorganization, with the creation of a new Consumer Information Department, is being considered. The difficulty of implementing such a proposal lies mainly in two areas.

- Traditional way of library organization of collection materials
- Librarians' lack of training in and preparation for consumer information areas

USER SATISFACTION

The most important criteria in determining the effectiveness of the library's consumer information services are ranked in the following order of importance:

1. Number of users who use the same service again
2. Cost per request for the relevant information provided
3. Focus groups' evaluation

The continuing support of the library administration for the consumer information services can be tested by whether or not the city votes to provide the needed tax levy. This is another excellent way to determine the effectiveness of the library's services.

CASE 5

REGIONAL ENERGY/ENVIRONMENT INFORMATION CENTER

DENVER PUBLIC LIBRARY*

BACKGROUND

In 1960, the Conservation Library Center of North America, a part of the Denver Public Library, was founded as a repository for information related to the conservation of natural resources, energy, and environment. It holds papers and assorted other materials for individuals, societies, and organizations active in the conservation movement including those of Arthur H. Carhart, the American Bison Society, the Forest History Society, and the Outdoors Writers Association. The Center also serves as a clearinghouse for current information on environmental issues, housing over 10,000 books, 1,000 serial titles, 700 manuscript boxes, and 95 file drawers of pamphlets. It also has access to the Denver Public Library's collection of government publications. These various resources are used by business people, government officials, consultants, lawyers, scientists and researchers, students, educators, and conservationists meeting everyday information needs. It is interesting to note that

> "Companies, consulting firms, environmental organizations, and government agencies doing research on: energy development, new recreational areas, land use, water, air, wildlife, use the Conservation Library for guidance to information on: ecology, environmental impacts, socioeconomic impacts, environmental history, laws, regulations, policies.
>
> Television stations and newspapers rely on the Conservation Library for accurate objective information and background materials on resource issues.
>
> When the Colorado Division of Wildlife reintroduced the river otter to Colorado on land belonging to the Denver Water Board, both agencies came to the Conservation Library for facts.
>
> The U.S. Bureau of Land Management and the U.S. Forest Service have both contracted with the Conservation Library to do technical studies on endangered and unique species.
>
> Lawyers use the government manuals, legal decisions, laws, regulations, historical records, available through the Conservation Library in advising their clients and

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*This report is based on an interview with Linda Cumming, Head, Conservation Library, conducted in August 1981.

determining procedure on cases. (1)

In 1975, the Denver Public Library facing a reduced budget and the need to curtail expenditures directed the Conservation Library to seek its own funding. Contact with federal agencies resulted in the establishment of the Regional Energy/Environment Information Center in June 1977. This unit of the Conservation Library embodies the desire of Federal agencies to maintain a centralized clearinghouse for energy/environment information. Accepting the arguments of the Denver Public Library that it did not need to build its own library when the Conservation Library was already in existence, the Energy Research and Development Administration (ERDA) (later merged into the Department of Energy), in conjunction with the Environmental Protection Agency, funded the first year's activities of the newly created Regional Center as a pilot project. ERDA established a FTS telephone to make information resources throughout the nation accessible to the entire region. Users do not encounter difficulty in getting through since calls can be received through three FTS lines or the general switchboard of the Denver Public Library. Often the main problem is that there is not always enough staff on hand to handle the calls; on some occasions there is only one person on duty.

The Regional Center accepts collect calls on the FTS lines, which are then paid for by the Department of Energy. This payment was supposed to end in July of 1981, but the government has not as yet discontinued the service. Nonetheless, the Denver Public Library is currently seeking alternative funding for the telephone service. The provision of consumer information requires an active telephone service. "The public demands free information," and wants questions answered without having to do an extensive search for information themselves.

Once established, the Denver Public Library has assumed the major responsibility for keeping the Center operational. It has renegotiated cooperative agreements with Federal agencies and actively sought additional support. According to Colleen Cayton, Director of Development and Public Relations of the Denver Public Library,

> "The money budgeted to Federal agencies does not carry an amount earmarked for information services and certainly not for public libraries. What we do is package our product and our services in terms which relate to the current program priorities and budgets of a specific agency. We must sell them on the fact that 'information services' are vital to achieve their program objectives. Often-times, that is the easy part. The real challenge comes in selling them on the fact that a public library is capable of

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[1] "Conservation Library," a general information pamphlet distributed by the Denver Public Library.

> presenting the rationale as well as delivering the services which warrant their serious consideration of the proposals we submit. (2)

In 1979 and 1980, the Department of Energy and Department of Agriculture continued their funding and promotion of the Center. Additional financial support came from the state budget for the Colorado Resource Center, local tax-appropriated library funding, which supported the materials budget of the Conservation Library, and the following Federal agencies: the Energy Information Administration, Environmental Protection Agency, and Bureau of Land Management. With sources of Federal monies drying up, the Center must seek alternative funding, if it is to survive.

THE CENTER TODAY

The objective of the Regional Center is "to provide a centralized information system accessible to the residents of the ten-state Rocky Mountain 'energy-impacted' region." Greatest use is made by residents of the city and county of Denver. Though residents from all parts of Colorado as well as other states (Arizona, Montana, Nebraska, Nevada, New Mexico, North and South Dakota, Utah and Wyoming) are encouraged to avail themselves of the service, most users are from the city and county of Denver.

The staff acquires current information on energy and the environment in the form of pamphlets, books, periodical and newsletter articles, publications of federal and state government (e.g., environmental impact statements), and conference proceedings. The Regional Center maintains an eighteen five-drawer vertical file, which contains pamphlets and ephemera. This file is divided into subject headings such as "associations," "bibliographies," "directories," and "meetings." For example, someone interested in Greenpeace will find an extensive pamphlet collection on the topic. Staff members monitor newspapers, newsletters, and periodicals for pertinent information. They index articles and consumer studies from periodicals such as Home Energy Digest and Alternative Sources of Information. The materials budget is little more than $3,000 per year. Recognizing the diverse forms in which essential information can exist, the staff maintains a referral file to "direct the private citizen not only to the appropriate agency, but to the individual who possesses the necessary information to answer a specific question." (3) For example, people call wanting to know what

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[2] "Essay for EIC Environmental Outreach Award," internal document of the Center, December 24, 1980, p. 5.

[3] Joan Hinklemeyer, "How RE/EIC Works to Answer Your Questions," Energy/Environment Information (The Regional Energy/Environment Information Center Newsletter), Volume 1, Number 1, (November 1980), p. 1.

agency handles consumer complaints. In addition, the Center has computer access to RECON (Department of Energy) database as well as to Lockheed, System Development Corporation, and Bibliographic Retrieval Services, Inc. The computer service, which is not well publicized to clientele, does not receive extensive use.

The Center disseminates information, provides document delivery services, engages in referral activities, acquires and organizes information, and offers consumer education programs. It has a $3,000 contract from the Western Solar Utilization Network (Western SUN) to aid the Colorado library community and educators in becoming better informed about energy/environment issues. Staff members from the Center travel around the state advise libraries in the development of energy collections at a minimal cost and alert them to various types of resources. They also encourage referral to the Center and use of their online databases. These workshops have increased the number of referrals to the Center. Referrals come mainly from libraries in the states of Colorado, Wyoming, and Utah. Infrequent referrals come from other libraries and government agencies.

The Center has a six-month contract (recently renewed) with the State Energy Extension Service (EES), which aids consumers in Service of the Department of Agriculture). (4) The EES receives assorted information gathered and compiled by the New York Institute of Technology; the Institute does this on a contracted basis for the U.S. Department of Energy. Robert Brown, Head of the State Energy Extension Service, finds that his staff as well as the personnel from the various regional energy extension offices lack the time and energy to sift through the assorted softcover books, photocopies of periodical and newspaper articles, government reports, pamphlets, and notices of energy-related films to find those that might be useful. Further, those materials which are not discarded are not well integrated with other office resources. This complicates efforts to retrieve desired information. The collection therefore is difficult to use.

Under the contract, Mr. Brown sends to the Center any new material received by the New York Institute of Technology. In return, the Center makes the material more accessible and useful by supplying annotations, subject headings for filing, and critical appraisals of the value and potential audience. This service aids collection development for the Center, since staff members see materials that they otherwise might not. The Center, which retains a copy of the material, has set aside $100 for the EES branches in each state so that the offices can request photocopies of any useful annotated material. The cost of the service is then deducted from the $100 deposit account. This service has generated an increased volume of business. On the negative side, photocopying has consumed a large share of one staff member's time. To be more effective, the Center wanted to hire a person who would have sole responsiblity for making copies.

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[4] The State Energy Extension Service provides information on such issues as what is the best wood burning stove, gasahol, and EPA estimated gas mileage.

According to Linda Cumming, Head of the Conservation Library, this service is based on the belief that to be a viable part of city government, a public library must demonstrate itself as useful or indispensable to the public and funding agencies. Unless this is done, information brokers or other groups will step in and further erode the potential role of public libraries.

The Environmental Protection Agency has entered into a contract with the Regional Center to develop more effective public "outreach" programs. Pursuant to this, the Center initiated a free newsletter, "Energy/Environment Information," in November 1980, providing consumer information, news stories and activities of the Regional Center. Since the contract supporting this project expires the end of September 1980, the Denver Public Library is searching for a financial alternative so that the newsletter can continue. It has cost $9,000 to produce five issues in the past year for distribution to more than 10,000 people mainly from the western region. Users of the collection can be placed on the mailing list if they so desire. In addition to reaching a wide audience, the newsletter, in inviting readers to "call us collect (303) 837-5994," generates good publicity for the Regional Center and the Denver Public Library.

Finally, the Regional Center administers research contracts for agencies such as the Bureau of Land Management. None of the money goes directly to the Center; the Denver Public Library is responsible for some of the overhead, while the rest goes to the researcher conducting the contract. The feeling is that if similar projects are to be pursued in the future, the Center must receive financial reimbursement for administration of the contracts.

Due to budgetary constraints, the Denver Public Library is closed on Thursdays, and open with restricted hours only five days a week. Persons wishing to consult the library, however, can call on a FTS line and receive service 7 a.m. to 9 p.m. Monday through Wednesday and 7 a.m. to 5:30 p.m. on Friday and Saturday (the library itself does not open until 10 a.m.). Undoubtedly these hours will further encourage consumers to telephone their questions, rather than personally visit the Regional Center.

The professional staff consists of three full-time and two half-time librarians, four of whom have the M.L.S. One clerk, one shelver, one editor (for the newsletter), two people on contracts, and five volunteers comprise the remainder of the staff. The professional staff, as well as the clerk and editor can engage in public service activities. Professional staff members are now specialists in energy/environment. They lack academic backgrounds in the area, but have offset this through extensive work experience, attending conferences and workshops, etc. The training office of the Denver Public Library conducts workshops on the art of interviewing.

Staff turnover since the beginning of 1980 has been low. However, due to further budget cuts in the Denver Public Library system, one of the professional staff may be terminated necessitating the reassignment of a worker from another part of the library to the Conservation Library.

Even with the increasing number of clientele and reference questions, and the decreasing outside financial support and the potential loss of one position, the staff does not impose limits on the amount of time spent in helping people. They try to meet information needs and to encourage repeated use of the collection and services.

Linda L. Cumming, head of the Conservation Library since 1980, has focused her efforts on the organization of collections, improved dissemination of information content, and consumer education (awareness of the Regional Center and its service role). Many items in the collection have not been catalogued and entered into the official records of the Denver Public Library system. Librarians outside the Conservation Library and the users who consult them may be unaware that the library has many newsletters and state documents. To provide better service in the system, and for librarians and users elsewhere, union lists of holdings must give a better indication of the extent and type of holdings. Her emphasis conforms with the objective of the Center: to demonstrate "the value and cost-effectiveness of building new information capabilities into existing resources and information sources." The Center provides evidence that a public library can serve as an information clearinghouse servicing libraries as well as non-library organizations.

Existing as part of the Denver Public Library, and as the clearinghouse for Federal and state agencies, the Conservation Library (of which the Regional Center is a part) is affiliated with several networks. This picture, however, is changing now that the availability of Federal monies is declining. The Regional Center, currently operating without Federal support, needs to attract alternative funding if it is to survive.

In a message to Congress dated September 26, 1981, President Carter transmitted the Report of the White House Conference on Library and Information Services and his recommendations on public access to information. In it, he noted that "the Denver Public Library is one example of a library that is working closely with several agencies to make consumer and environmental information available. I encourage and support cooperation like this." The National Commission on Libraries and Information Service has also acknowledged the value of the Conservation Library and helped arrange for Barbara Bush, wife of the Vice-President, to visit Denver and the Library on September 18 and 19, 1981. Her visit will generate publicity, and it is hoped, encourage local Republicans to contribute money for the support of the Center's programs and services (see Addendum for an update on the proposed visit.)

USER STATISTICS

Users, whether they are walk-in or telephone callers, are asked to complete part of a questionnaire for each inquiry; according to Regional Center staff, most users are willing to cooperate. The remaining part of the questionnaire is then completed by staff members. The questionnaire (see Figures 1 and 2) (5) provides a good indication of the types of reference questions asked, the nature of the clientele, the resources used, whether referral was necessary, etc. Completeness of the questionnaire and the nature of the summary statistics compiled minimize the need to survey users in other ways. The criteria with which the Conservation Library judges the success of the consumer service are:

- number of questions received
- whether the question was answered
- whether referral was provided (if referral is outside the Denver area, staff members make the call and relay the information to the user. They will do the same within the Denver area if they feel users need this service)

Referral can save the user both time and money. The only question that a user survey would answer is whether a user having to contact the outside agency, organization or individual received the necessary information and was fully satisfied with the referral.

It might be useful to summarize trends from the monthly statistics before discussing interview findings. Users of the Regional Center are most likely to come from the city or county of Denver, or a nearby suburb (these account for approximately 87 percent of the users). The remaining users come from other parts of the state (8%) and other states (5%). Following is a ranking of the major groups according to frequency of use:

- Students
- Business People
- Consumers
- Government Officials
- Faculty, Private Organizations, and Libraries

Since approximately half of the users have previously consulted the Center's resources, the frequency of repeated users becomes a

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[5] Data on users has been gathered since January 1980. The questionnaires will be redesigned now in light of the Regional Center's loss of Federal support. Additional reference questions are answered by mail and the publication of consumer information in the newsletter.

Figure 1. User Questionnaire Form #1

REGIONAL ENERGY/ENVIRONMENT INFORMATION CENTER DENVER PUBLIC LIBRARY

Date ____________________ ____ Telephone Time in: __________

By ____________________ ____ Mail Time out: __________

____ ILL Elapsed time: __________

Question: ____

____

____

____ Referral to: ______________________________

Name: ______________________ ____ Denver/City/County

Address: ______________________ ____ Suburban/outside Denver

______________________ ____ CO - outside Denver/Suburban

______________ZIP ______ ____ Outside CO, please specify:

____

Telephone: ______________________

After providing help requested: "We are taking a survey of the people we help. May I ask you a few quick questions?"

"Have you used our services or called before?" NO ____ YES ____ "About how often?" ____________

"How did you hear or learn about our services?"

____ Brochure ____ Librarian ____ Poster/display

____ Card catalog ____ Newspaper ____ Radio

____ Friend ____ Phone directory ____ Teacher

____ Other: ______________________________

"What kind of organization do you work for, or whom do you represent?"

Academia ____ Business ____ Private organization

____ Student ____ Government ____ Self

____ Faculty ____ Library ____ Other: ____________

"May we put you on the mailing list for our newsletter?" NO ____ Already on ____

YES ____ "Same as above?" YES ____ NO ____

Name: ______________________________

Address______________________________ZIP ______

Sources: ____ Indexes ____ Books ____ Pamphlets

____ Magazines ____ Conference/Proceedings ____ Documents

____ Other: ______________________________

Material sent from: ____ BLM ____ DOE ____EPA ____ RE/EIC

____ DOE ____ EIA ____ Other: ____________

For staff use only

An answer to this question fulfills the mission of the following contractors:

____ Colorado Resource Center ____ Energy Information Administration

____ Dept. of Energy ____ EPA

____ Dept. of Agriculture ____ Bureau of Land Management

Other: ______________________________

Figure 2. User Questionnaire Form #2

Regional Energy/Environment Information Center (RE/EIC) Denver Public Library

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We need your help to provide better service to you. EACH TIME YOU USE THE RE/EIC, please fill out this questionnaire when you have time and return it to us. Please feel free to comment on any or all questions. Thank you for your help.

Date: ____________________

What is the nature of your project, question, or the services used? ____________

Did a RE/EIC staff member refer you somewhere else? NO ____
YES ____ Where? ____________

Where do you live? ____ Denver/City/County ____ Outside CO, please specify:
____ Suburban/outside Denver
____ CO - outside Denver/Suburban ____________

Have you used RE/EIC services or called RE/EIC before? NO ____
YES ____ About how often? ____________

How did you hear or learn about RE/EIC services?

____ Brochure ____ Librarian ____ Poster/display ____ Teacher
____ Card catalog ____ Newspaper ____ Program
____ Friend ____ Phone directory ____ Radio ____ Other, specify: ____________

What kind of organization do you work for, or whom do you represent?

Academia ____ Business ____ Private organization
____ Student ____ Government ____ Self
____ Faculty ____ Library ____ Other: ____________

What sources of materials did you use?

____ Books ____ Documents: ____ Magazines
____ Conference proceedings ____ Indexes ____ Pamphlets
____ Other: ____________

Did you pick up any free material? YES ____ NO ____

Comments (use other side for more space):

May we put you on the mailing list for our newsletter? NO ____ Already on ____
YES ____ Name: ____________
Address ____________ ZIP ____

For staff use only

An answer to this question fulfills the mission of the following contractors:
____ Colorado Resource Center ____ Energy Information Administration
____ Dept. of Energy ____ EPA
____ Dept. of Agriculture ____ Bureau of Land Management
Other: ____________

Time patron arrived: ____________
" " left: ____________
Elapsed time: ____________

criterion for determining effectiveness. If first time users had been referred to the collection, it was primarily from:

- librarians (within and outside the Denver Public Library)
- advertisements in the Yellow Pages of the telephone directory
- word of mouth from previous users

The major means of publicity include the newsletter, workshops, and word of mouth. In answering reference questions, staff members and users are most likely to consult (ranked in order of frequency of use):

- books
- magazines
- government publications (Federal and state)
- pamphlets and ephemera
- indexing and abstracting services
- other
  - referral file (personal contacts, etc.)
  - personal knowledge
- conference proceedings

According to Linda Cumming, 75 percent of the Regional Center's reference questions are energy related. Few questions are received in the areas of water pollution and environment (except those relating to energy). Table I reproduces some of the reference questions asked. It is obvious that not all of them fit our definition of consumer information. This is confirmed by the examination of the major user groups. Students working on term papers and theses, as well as users needing information for work-related needs, are not raising consumer related questions. With this in mind, the Regional Center's definition of consumers should be put forth: people seeking energy/environment information for themselves (non-work situations). From July to December 1980, for example, 29 percent of the questions asked were consumer-related.

User satisfaction with the serivce of the Regional Center is determined in three ways: (1) questionnaire responses and letters written by satisfied customers, (2) oral comments made after resolution of the information need, and (3) monitoring the number of repeated users.

The Conservation Library has to justify its services to outside funding sources for continuing support. Demonstrating support can go in different forms. For example, the Library can produce data from the questionnaires showing the services provided to an agency's clientele or staff, or the Library can fulfill the terms of a contract such as the one provided by the Energy Extension Service; the latter part of this report discusses the contract in greater detail.

TABLE 1: SAMPLE REFERENCE QUESTIONS ASKED

1. Energy efficiency of refrigerators
2. Information on solar tax incentives
3. Have books or government documents on a particular topic
4. List of endangered species
5. Which whales are endangered
6. How to design a coal burning furnace
7. R-values for ________________
8. Rating of wood stoves
9. Care for injured baby hawk
10. Habits of coyote
11. Where are nearby jogging trails
12. Phone number for EPA hazardous materials division
13. Information on a particular government regulation (e.g., temperature regulation for office buildings; are regulations concerning thermostat settings still in effect)
14. Grants for home energy systems
15. Information on degree days
16. Information on grasshopper control
17. Converting a greenhouse from natural gas to coal
18. A list of curriculum guides issued by Department of Energy
19. Information on starting a business in the energy field
20. Address or phone number of a government agency (e.g., where to call for information on tax rebates for solar energy)
21. Incubation period for robin eggs and what to feed robins
22. Definition of acid rain
23. Gasohol
24. Information on Greenpeace

GOALS

The Regional Energy/Environment Information Center has represented "a unique example of cooperation between Federal, state, and local governments, and between energy/environment interests in both the public and private sectors." Further, staff at the Center believe that it has demonstrated "the value and cost effectiveness of building new information capabilities into existing resources and information services." (6) This is the only goal statement that the Center has developed.

Linda Cumming was asked her opinion on how well the network's consumer goals are defined and communicated. Using a scale of one ("to the greatest extent") to five ("to the least extent"), she was first asked to what extent she believes members of the network are aware of the consumer goals. Her rating was a "four", because she finds that government officials know of the service but do not use it as much as they might. These officials appear reluctant to refer questions to the Regional Center. As to what extent end users of the network (citizens and other libraries) are aware of the service, the rating was a three. The newsletter and the workshops create an awareness. If these are discontinued due to a lack of financial support, the rating would decrease. Ms. Cumming believes that the goals provide a workable framework for the daily operation of the service (a rating of four) and that the Center has developed plans to meet the goal (also a four).

The Denver Public Library has actively and aggressively sought money, but at present support is hard to generate. Network goals cannot be accomplished without this support; "our hands are tied due to the lack of money." Ms Cumming questions whether the Center can exist if support is not forthcoming.

In relation to the network goal, Ms. Cumming was queried about the importance of certain activities. She was asked to rate each on a scale, with one as "most important" and five as "not important at all." Five activities all rated highest priority (information acquisition, information organization, information dissemination, information referral, and lobbying). Lobbying attracts funds that facilitate the maintenance of the present level of services. Document delivery and problem-solving both rated a two. Consumer education was listed as a three, with advocacy and information interpretation/advice accorded a five. She questioned if public libraries, which are funded by municipal taxpayers should engage in advocacy or information interpretation.

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[6] "Energy/Environment Information," a general information pamphlet of the Regional Center.

FUTURE STUDIES

When asked about the type of consumer services that the Regional Center would like to provide over the next two years, Ms. Cumming qualified her response. It "depends on having the necessary money." If financial support were available, she would like to compile a directory of consumer information relating to solar energy. She noted that "solar energy is crying for consumer information" and that such a reference work would sell well. However, she observed "to make money you must already have it." Other services that she would like to offer are continuation of the newsletter, adoption of telecommunication so that there could be quick interaction with the entire ten state region, and the provision of on-line access to some of its reference sources (e.g., the referral and vertical files).

RELATIONSHIP WITH OTHER NETWORKS

The Regional Library does not maintain formal links with other networks engaged in the provision of consumer information services. Contacts are established informally through attendance at association and other meetings. Staff members, however, consult non-library networks whenever necessary. They contact private organizations and government officials. They might also refer consumers to other members of their clientele, presuming these individuals are willing to accept referrals.

As noted earlier, staff members will handle referrals for patrons needing information available outside the Denver area. In these cases they can interact with the patrons to determine how well their consumers' information needs have been met. In those instances in which the patrons themselves make the referral, staff members cannot determine how well information needs are met. They lack the time and staff to recall these people to determine referral satisfaction. It is interesting to note that many of those referred will use the Regional Center again. Consequently, repeat use provides one measure of satisfaction.

FUND ALLOCATION

Most of the budget supports public service activities. The budget for the last fiscal year consisted of monies from the Federal Government (85%), state government (5%), local government (2%), and contracts (8%). Consumer services, excepting computer searching, are provided free. Computer searching is infrequently used. Major user groups (students, faculty, and conservation organizations) expect free information and seem unwilling to pay for it. Business people, on the other hand, are willing to pay, while government officials feel that they are already paying for the service (since Federal agencies provide a large percent of the Regional Center's budget).

The public service budget for the last, and probably for the next, fiscal year spent in support of the delivery of information (85%), consumer education (10%), and on-line bibliographic services (5%). According to Ms. Cumming, consumer education, which encompasses the newsletter and the workshops, is the area in which the administration of the Denver Public Library might like to see the Regional Center expand. However, the lack of staff and time make it difficult to undertake any further obligations.

Even with the severe curtailment of Federal funding, the Center would like to maintain the current level of programs and services. In order to do this, the staff must find revenues elsewhere to offset diminishing Federal support.

INFORMATION TRANSFER AND NEW TECHNOLOGY

More consumer information services are becoming available in nonconventional ways (e.g., home delivery of information and the provision of information at supermarkets by utilizing new technology such as computer terminal facilities). With this in mind, Linda Cumming was asked about the role of new technology for the consumer information currently provided. She sees the value of telecommunication, including cable television and home computers. It would be helpful to place terminals at various service points in the Denver Public Library system for public use. If funding is available, the Library system might use telefacsimiles so that photocopies of material held at a particular location in the system could be generated and quickly sent to the patron in need. The major advantage of new technology, assuming the cost factor can be controlled, is that people can quickly identify and gain access to needed information.

FIVE FACTORS

Ms. Cumming was presented with five factors related to the provision of consumer information services and asked to rate their importance. Her ranking is as follows:

- up-to-dateness of information
- accuracy of the answer
- understandability of the answer
- the time it took
- the cost in money

The first three, she believes, are interrelated and of importance to consumers. They want current and accurate information, which they can understand. In some cases, up-to-dateness may be of overriding importance. For example, persons seeking information relating to governmental regulation need to know how the regulation applies right now. They are concerned with time and cost, if it is their time and money. However, if these factors refer to library and librarian cost and time, they become inconsequential to the user.

ROLE OF PUBLIC LIBRARIES IN PROVIDING CONSUMER INFORMATION SERVICES

Public libraries need to find innovative ways to survive. They must compete successfully with other information providers and offer services in demand by the public. For example, they should be active in the provision of consumer information and give highest priority (rated a one by Ms. Cumming) to information acquisition, organization, dissemination, and referral. Public libraries must take on a more active role as a referral agent. They must build referral files and assist clients in gaining access to information, whether it is found locally or elsewhere. Ms. Cumming accorded a two to document delivery, consumer education, lobbying, and problem solving. Public librarians should experiment with telecommunications and contracted services such as the one that the Regional Center performs for the Energy Extension Service. Lobbying "had better increase if we want to continue or expand our present level of services;" "we have to sell ourselves more effectively."

Public librarians need to be more effective advertisers of their services. The Regional Center finds that its newsletter and workshops provide effective publicity; the newsletter keeps the Center visible among its current users and encourages them to make repeated use of the Center's resources. Equally important is the value of providing good service. If clients are courteously received and efficiently dealt with, they will return as well as notify their friends. Interpersonal communication is a major means by which people become aware of consumer services.

Advocacy and information interpretation/advice were listed as "least important." It was questioned if public libraries, as part of city government, should be involved in such activities. Further, many librarians, bound by traditional modes of thought about the role of the library, would be reluctant to take on such a responsibility. Advocacy and information interpretation are better left to other information providers.

STATE ENERGY EXTENSION SERVICE AND ITS CONTRACT WITH THE REGIONAL CENTER**

Federal legislation in the late 1970s led to the establishment of energy extension services in many states. Federal monies could be received but initially not for disseminating information to the public. Even with the Energy Conservation Production Act (ECPA), consumers were not alerted where they could gain information. Delivery of information to the public came later. The Energy Extension Service (EES), modeled after the County Extension Service, disseminated information on energy conservation and renewable resources; people would request information and also receive training (e.g., with home caulking, etc.).

Under the EES, ten states, including Wyoming and Tennessee, participated in a pilot project for the dissemination of information. The other forty states received grants so that they could be fully informed about the pilot project and so that they could later develop their own dissemination systems. The Center for Energy Policy and Research, New York Institute of Technology (Old Westbury, NY 11568) received a contract from the Department of Energy to gather, package, and disseminate information to the states involved in the pilot study. The purpose of the clearinghouse was to receive, accumulate, and disseminate material so that the states would not need to receive and monitor much of the new information being generated. In 1980, the clearinghouse began to send information to all the other states.

The Energy Extension Service, within the Office of Energy Conservation (State of Colorado), receives each month from the New York Institute of Technology, a box of assorted materials (including books, pamphlets, posters, advertisements, news releases, photocopies of newspaper articles, buttons, and actual products including thermometers identifying heating zones) relating to energy policy and research. This material, some of which states send to the Institute, is known as INFO EES and is supposed to reflect the newest and most valuable information in the field. In actuality, the material is of varying quality and not always current. Further, the EES receives duplicate shipments, and is faced with the problem of how to distribute material to the field offices across the state. Mr. Robert Brown, the Director of the EES, used to spend time going through each monthly shipment determining the audience, quality of the information, quantity needed, and up-to-dateness of the information. He and his part-time secretary tried to make the information available to the field offices, but this became a time-consuming responsibility. Disseminating the information to the field offices on time presented a real problem. Additional

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**The interview was conducted with Mr. Robert Brown, the Director of the state agency, in August 1981.

information might come across his desk and should be passed along to the field offices. Although INFO EES is available in summary form, the condensations are still too bulky and time consuming to browse.

Each INFO EES shipment contains the actual items; a cover sheet presenting subject headings for filing purposes; cost; an annotation (in some instances); and other information. There is, in addition, a duplicate of each cover sheet. Figures 3 and 4 reprint both forms. The problem is that suggested subject headings are too general and that annotations, when they are present, are also general. According to Mr. Brown, the annotations are "not very helpful; they are often terrible."

Having dealt with the staff of the Regional Center on various energy/environmental matters, the EES was aware of the Center, and recognized its staff as competent and specially trained. Consequently, Mr. Brown approached the Center with a proposal that they pool their energies on INFO EES. The result was a six-month contract between the State EES and the Denver Public Library by which funds from the U.S. Department of Energy would be made available to the Regional Center in return for performing certain services. Upon receipt of the duplicate shipment, Mr. Brown forwards it to the Regional Center for the assignment of more detailed subject headings, annotations, and distribution of requested items to field offices. Summary sheets prepared on each item are dispatched to field offices, which can then order directly from the Regional Center. The central EES office is, therefore, relieved of this time-consuming function and the field offices benefit from the subject headings assigned, the annotations, and the copies supplied.

To summarize, the State Energy Extension Service receives two benefits: 1) the shipments from the New York Institute of Technology, and 2) the contracted services of the Regional Center. The Regional Center gets information to the field offices in a useable form. Both may be subject to government budget-cutting. The U.S. Department of Energy could decide to discontinue its contract with the New York Institute of Technology. In that case, or if funds became unavailable, states could then choose to support the New York Institute or some other information provider could step into the resulting void. It might be a library, commercial company, etc. Libraries may not be able to gather information from all over the United States in a cost-effective way in order to establish a national service. However, they may be able to play a significant and valuable role at the state or local level. The EES might even be unable to renew its contract with the Regional Center if funds dry up. As Mr. Brown explains, "if the option is reduction of my office and its service or continuation of the contract with the Regional Center, I would have to choose against the Center." It is his hope that the choice will not have to be made. The six-month contract with the Regional Center was recently renewed for $9,000.00.

Figure 3

INFO EES

Suggested Subject Heading Alcohol Fuels

Energy Efficiency Service
for State and Local Conservation Programs

Date June 30, 1981

1. Title of item Fuel Alcohol On the Farm — A Primer On Production and Use		
2. Author(s)		3. Identification No. 8106-114
4. Publisher and address U.S. National Alcohol Fuels Commission 412 First Street, SE 202-426-6490 Washington, DC 20003		
5. Publication date 1980	6. Format Government Report	7. Cost Free
8. Distributor of additional copies: ☒ Publisher ☐		
9 Status: Item is attached ☒	Descriptive material is attached ☐ *	Item is described below ☐ *
10. Annotation		

* At present, the GAP (General and Practical) computer file of the Technical Information Center, Oak Ridge, Tennessee, includes this item Yes ☐

INFO EES
Center for Energy Policy and Research
New York Institute of Technology
Old Westbury, New York 11568
Telephone: (516) 686-7744

1631/PL80280 -1

DEPARTMENT OF ENERGY
UNITED STATES OF AMERICA

INFO EES

Figure 4

Suggested Subject Heading Industry & Commerce (Conservation)

Note: This item is commercial-product literature. Its inclusion is for information purposes and does not constitute endorsement.

Energy Efficiency Service for State and Local Conservation Programs

Date June 30, 1981

1. Title of item Close the Door on Expensive Energy Loss -- Conservador Superior Strip Doors		
2. Author(s)		3. Identification No. 8106-128
4. Publisher and address Randall Industries 685 Executive Drive Hinsdale, IL 60521 312-920-9290		
5. Publication date 1978	6. Format Brochure	7. Cost Free
8. Distributor of additional copies: ☒ Publisher ☐		
9. Status: Item is attached ☒	Descriptive material is attached ☐ *	Item is described below ☐ *
10. Annotation		

* At present, the GAP (General and Practical) computer file of the Technical Information Center, Oak Ridge, Tennessee, includes this item Yes ☐

INFO EES
Center for Energy Policy and Research
New York Institute of Technology
Old Westbury, New York 11568
Telephone: (516) 686-7744

The field offices, as well as the central office, liked the product produced by the Regional Center under the first contract. They found it a "handy tool." Information in a useable form was filtering out to the field offices and through them to the general public. Field offices might incorporate the information received from the Regional Center into a pamphlet file or order bulk quantity from the Center for their clientele. The Regional Center was supplementing the information contained in the boxes with source material it had uncovered. For example, the shipments have not contained solar energy fact sheets, but the Regional Center has identified some and made them available.

On the basis of comments from the central and field offices, the new contract attacks some deficiencies in DOE's contract with the Institute. First, staff of the central and field offices were still receiving too much information. Not only was it time-consuming to sift through and sort out the more important items, but the information was very often "too long" and "too wordy." The Institute does not send sufficient copies, permitting distribution to the field offices. The information is not transmitted to the field quickly; it is often duplicative and incomplete. The Regional Center can help address these problems by providing additional condensation, adding more complete annotations and subject evaluations. The intent is to reduce dissemination and organization of trivial, superseded, or outdated information. At the same time, field offices would receive needed information in a timely fashion.

Mr. Brown thinks that other libraries could also serve as repositories or clearinghouses for information. In so doing, they would perform a useful, needed function. Government agencies, for example, need assistance in the organization and dissemination of information. If libraries do not play a role, some other information provider will. He noted that "since every state has an energy extension service or a means for distributing energy information, libraries could act as clearinghouses to keep people better informed." He believes that too often information found in government offices is disorganized and not fully distributed. "Libraries should take advantage of this situation," because "clearinghouses are essential when you are dealing with a lot of information." At the same time, libraries receive another benefit: they can gather and retain information in need - information that they might not be able to obtain elsewhere.

Mr. Brown thinks that new technology has a role in the organization and dissemination of information. He would like to see the information in his office stored in a computer so that it is readily retrievable from various sites, e.g., his office, field offices, and the library. Libraries could help organize information and provide computer access to other networks. However, he does not foresee funding for undertaking such projects. This is a "pipe-dream."

Mr. Brown was asked about the value of the five factors in relation to the contract with the Regional Center. He ranked three items of equal and highest priority: the cost in time, its up-to-dateness, and accuracy. The purpose of the contract is to save them time and to get current, accurate information. As part of the contract, staff at the Regional Center will identify the audience for which the information might appeal. This maximizes understandability, which places next in priority. The cost is the least important now, because money is available. Without funding, the service would not continue.

CONCLUSION

The EES benefits from its contract with the Regional Center because it no longer has to "worry" about what information is needed by the field offices and in what quantity. Mr. Brown expects that he will soon discontinue the practice of sifting through the new shipments himself and will wait for the annotations from the Regional Center. He noted that the only exception to this might be the products and gadgets actually sent by the New York Institute. Subjective annotations, assuming the Regional Center can anticipate his needs, will perform a vital function. They will reduce the amount of "bulk" or information that EES officials need to examine.

It should be noted that the Regional Center provides but one means by which the EES gathers information. It maintains contacts with other networks. Still, the Regional Center is perceived as performing a needed service, one though that the EES "could live without if we have to." The Regional Center has cooperated with the EES on other projects as well. For example, the State Energy Extension Service, the Denver Public Library, the Cooperative Extension Service, and the Public Utility Company co-sponsored a series of workshops on weatherization of the home. These workshops were not well publicized and organized, and consequently, were only sparsely attended. Further, they had to compete with other demands for the public's time.

ADDENDUM[+]

The Conservation Library has been relocated. It is now situated on the second floor rather than on the third floor. The second floor houses resources pertaining to science and

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[+] The addendum is based upon an interview with Linda Cumming, Head, Conservation Library, conducted on January 29, 1982.

technology, business, energy/environment, and government publications. Together these resources address the information needs of the technical community. The new location is actually better for the Conservation Library. Situated near the stairway, it can be easily observed by all library clientele making use of resources on the second floor.

The Conservation Library no longer receives Federal funding. The data gathering forms (see Figures 1 and 2) have been revised in order to delete the type of information useful only by Federal funding agencies (see Figures 5 and 6). At present, there is no FTS telephone line. However, if the Conservation librarian believes that "an important reference question" requires outside referral, she will make long distance telephone calls through the switchboard of the Denver Public Library.

Through the shifting of budgets, the Denver Public Library has retained Linda Cumming, the Conservation Librarian, and one other full-time librarian. Through a fund raising campaign to subscribers of Energy/Environment Information, the newsletter, and interested businesses, sufficient funds were generated to produce two more newsletters and to retain the part-time staff member who edits it. (7) All other staff members have been

Until recently, the newsletter "has been circulated on a complimentary basis paid for by Federal and State funds." The January 1982 issue (Volume 2, Number 1) carried an "Appeal to Newsletter Readers," which requested:

> "If you want to continue to receive the newsletter or be added to our mailing list, we ask you to contribute what you can toward the continued publication of Energy/Environment Information. If each individual, family, business, or organization receiving the newsletter will give just $5.00 (more if you can), Energy/Environment Informationshould be able to continue into the months ahead, doing more issues such as its special passive solar issue and its oil shale issue which gained its recognition throughout the West. (Planned future issues are to deal with water in the West and energy conservation alternatives for businesses, industry, and cities).
>
> "Meanwhile, for the businesses and organizations receiving Energy/Environment Information, if you would like to contribute a gift toward the continued publication of the newsletter in addition to the $5 subscription rate, it will be most welcome and appreciated. Several companies have already done so, giving us a significant boost toward our needed budget. In return for this tax-deductible donation, you will benefit from the knowledge that you are helping to provide an objective and timely publication.

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[7] The Burlington Northern Railroad has expressed interest in buying and publishing the newsletter.

Figure 5

REGIONAL ENERGY/ENVIRONMENT INFORMATION CENTER

Telephone Survey

Date________________	Phone______	Time in________________	Total # of questions
By__________________	Mail ______	Time out______________	
	ILL ______	Elapsed time___________	__________

QUESTION:____

____

____

____

____

Sources:

______RE/EIC Index	______Conference/ Proceedings	______Magazines
______Referral File	______Directories	______Pamphlets
______Books	______Documents	______Other_______________

Referred elsewhere? Yes______ No______

****

PATRON:

Name____

Address____Zip____________

Phone________________________________

1. What kind of organization do you work for, or whom do you represent?

Business (Name)____

Private organization (Name)____________________________________

Government (Agency)____

Faculty______ Library______ Self______ Student______

2. First contact? Yes______ No______

3. Newsletter Yes______ No______ Already receive______

Figure 6

REGIONAL ENERGY/ENVIRONMENT INFORMATION CENTER

Walk-in Survey

Date________________

We need your help to provide better service to you. Each time you use this department, please fill out this questionnaire and return it to us when you leave. Please feel free to comment on any or all questions. Thank you for your help.

1. What is the nature of your project, question, or the services used? ______________

2. Have you used this department or called us before? Yes_______ No_______

3. What kind of organization do you work for, or whom do you represent?

Business (Name)____________________

Private organization (Name)____________________

Government (Agency)____________________

Faculty______ Library______ Self______ Student______

4. Did we refer you elsewhere? Yes______ No_______

5. Do you live in the City and County of Denver? Yes______ No______

6. Would you like to receive our newsletter? No______ Already receive it______

Yes______ Name:____________________

Address:____________________Zip:__________

For staff use only:

Sources:

______RE/EIC Index
______Referral File
______Books
______Conference/Proceedings
______Directories
______Documents
______Magazines
______Pamphlets
______Other______________

Time patron arrived:__________________

Time patron left:__________________

Elapsed time:__________________

released or transferred to other departments within the Denver Public Library system. Ms. Cumming has to perform clerical functions (e.g., the opening of mail and the processing of newly received serials), in addition to reference work and managing the Conservation Library. She has even had to negotiate with other library departments to borrow pages to reshelve books and periodicals.

The Denver Public Library is currently exploring the possibility of joining with the private sector in a joint venture to market the services of the Conservation Library and to make it self-supporting. The intent is to produce a fee-based information service operated out of a public library, with funding from the private sector. A corporation has expressed interest in supplying the necessary capital and marketing expertise. If the agreement is finalized, the Conservation Library would, over time, be able to rehire staff members, obtain a WATS line, and expand services to businesses, organizations, and government agencies. The Denver Public Library would therefore, be able to maintain the collections of the Conservation Library and learn about marketing from the private sector. The insights gained could be applied to other services and programs maintained by the Denver Public Library.

The concept of a fee-based information service may be difficult for some groups to accept. Businesses and organizations use the information services of a public library and should be willing "to provide support in return." As Ms. Cumming noted, the business community "must realize that not all information services are free." "There is a limit as to the amount of library services that tax dollars should provide." Further, she finds that private information brokers use the human and collection resources of the Denver Public Library and then turn around and charge their clients a fee. Given the financial situation faced by many public libraries, she believes that the libraries could use the revenue generated from user fees to maintain essential services.

The chance of the Denver Public Library getting the fee-based information service looks good. However, if the plan fails to materialize, the Conservation Library would be merged with the Business, Science, and Technology Department. Ms. Cumming would then become a subject specialist in the enlarged department.

One program mentioned in the main report merit updating. The contract with the State Department of Energy lasted through February 1982. The contract will probably not be renewed. The Conservation Library does not have the staff necessary to maintain the contracted services, and the State department lacks the funds to continue the contract. It should be noted, however that State officials regard the services performed as beneficial. If support from the private sector materializes, the Conservation Library might attempt to renegotiate the contract.

THE FOUR NON-LIBRARY NETWORKS

CASE 6

BETTER BUSINESS BUREAU OF WESTERN MASSACHUSETTS*

SPRINGFIELD, MASSACHUSETTS

The Better Business Bureau, which is a private, non-profit corporation supported by private business, tries to protect business and consumers from unethical business practices. Dating back to the early part of this century, the Bureau has promoted truth in advertising and public confidence in business, as well as encouraged self-regulation through voluntary cooperation. The local organizations in the United States and other countries (see Table 1) are linked to the Council of Better Business Bureaus, Inc., which has as its objectives:

> "to restructure and revitalize the Bureaus; to provide more effective means for handling inquiries and complaints; to provide to business analyses of consumer complaints and inquiries; to better protect the public from fraudulent and deceptive trade practices; to implement a workable program of advertising self-regulation." (1)

Council headquarters in Washington, D.C., which

> "coordinates the activities of member Bureaus, issues trade practice codes on the national level, administers the BBB arbitration program, disseminates information about charitable solicitations, and performs consumer education and public information functions. The Washington office also works closely with government regulatory agencies and trade associations, and keeps abreast of government activities that concern business and consumers." (2)

The office in New York City "has two primary functions: to monitor and investigate complaints against national advertising, and to maintain and increase support for CBBB among major corporations. (3)

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[*] The interview was conducted with William C. Webb, Director, Springfield Better Business Bureau, 293 Bridge St., Springfield, MA 01103, in September 1981.

[1] Consumer's Buying Guide: How to Get Your Money's Worth. New York: Benjamin Co./Rutledge Book, 1969. p. II.

[2] "What is a Better Business Bureau," a consumer information pamphlet of the Better Business Bureau.

[3] Ibid.

Table 1. Office of the Better Business Bureau in the United States and Other Countries

UNITED STATES

ALABAMA
Birmingham
Huntsville
Mobile

ARIZONA
Phoenix
Tucson

ARKANSAS
Little Rock

CALIFORNIA
Bakersfield
Fresno
Long Beach
Los Angeles
Oakland
Orange
Sacramento
San Bernardino
San Diego
San Francisco
San Jose
San Mateo
Santa Barbara
Stockton
Vallejo
Van Nuys
Walnut Creek

COLORADO
Denver

CONNECTICUT
Bridgeport
Hartford
New Haven
Stamford

DELAWARE
Wilmington

DISTRICT OF COLUMBIA
Washington

FLORIDA
Miami
West Palm Beach

GEORGIA
Atlanta
Augusta
Columbus
Savannah

HAWAII
Honolulu

IDAHO
Boise

ILLINOIS
Chicago
Peoria

INDIANA
Elkhart
Fort Wayne
Gary
Indianapolis
South Bend

IOWA
Des Moines
Sioux City

KANSAS
Topeka
Wichita

KENTUCKY
Lexington
Louisville

LOUISIANA
Baton Rouge
Lake Charles
Monroe
New Orleans
Shreveport

MARYLAND
Baltimore

MASSACHUSETTS
Boston
Springfield
Worcester

MICHIGAN
Detroit
Grand Rapids

MINNESOTA
Minneapolis
St. Paul

MISSISSIPPI
Gulfport
Jackson

MISSOURI
Kansas City
St. Louis
Springfield

NEBRASKA
Lincoln
Omaha

NEVADA
Las Vegas
Reno

NEW JERSEY
Haddonfield
Newark
Paramus
Trenton

NEW MEXICO
Albuquerque

NEW YORK
Buffalo
New York City
New York (Harlem)
Rochester
Schenectady
Syracuse
Utica
Westbury
White Plains

NORTH CAROLINA
Asheville
Charlotte
Greensboro
Winston-Salem

OHIO
Akron
Canton
Cincinnati
Cleveland
Columbus
Dayton
Toledo

OKLAHOMA
Oklahoma City
Tulsa

OREGON
Portland

PENNSYLVANIA
Philadelphia
Pittsburgh
Scranton

RHODE ISLAND
Providence

TENNESSEE
Chattanooga
Knoxville
Memphis
Nashville

TEXAS
Abilene
Amarillo
Austin
Beaumont
Bryan
Corpus Christi
Dallas
El Paso
Fort Worth
Houston
Lubbock
Midland
San Antonio
Waco

UTAH
Salt Lake City

VIRGINIA
Norfolk
Richmond
Roanoke

WASHINGTON
Seattle
Spokane
Tacoma
Yakima

WISCONSIN
Milwaukee

CANADA

ALBERTA
Calgary
Edmonton

BRITISH COLUMBIA
Vancouver
Victoria

NEWFOUNDLAND & LABRADOR
St. John's

MANITOBA
Winnipeg

NOVA SCOTIA
Halifax

ONTARIO
Ottawa
Toronto

QUEBEC
Montreal
Quebec

INTERNATIONAL

ISRAEL
Haifa
Tel Aviv

MEXICO
Mexico City

PUERTO RICO
Santurce

VENEZUELA
Caracas

The aims of the Bureau have been succinctly summarized as:

- "to protect the buying power of the consumer
- to encourage honesty in business
- to inform the public on how to do business so the consumer can buy intelligently and gain maximum satisfaction from his purchases." (4)

The activities of the Bureau could be characterized as:

- Investigate and act on instances of deceptive or unethical business practices
- Issue factual reports on individual business firms in response to inquiry
- Investigate advertising which appears to violate regulations or accepted standards and seek corrections where appropriate
- Mediate buyer-seller disputes
- Report on charitable organizations and other requesting donations
- Issue warnings on schemes and frauds that may be attempting to victimize businesses or consumers
- Cooperate with law enforcement and regulatory agencies to deal with situations that do not respond to self-regulation
- Cooperate with other BBBs in exchanging information on schemes and fast moving operations
- Work with industry and trade groups to develop and implement effective programs of voluntary self-regulation
- Assist consumers in observing wise buying practices through printed materials and electronic media
- Bring information and economic education programs to the public in order to promote a greater awareness of the workings of the free enterprise system and the interdependent role business and consumers. (5)

The Bureau assists in mediating misunderstandings between the public and business, supplies factual information on businesses, examines misinformation in advertising, warns businesses about advertising and selling, and suggests referral sites for resolving business or financial problems. It might be noted that the Bureau prefers consumer complaints to be written, with full and accurate information. The complaints may then be mediated with the business firm in question. In cases where mediation does not resolve the problem, the consumers may seek arbitration as an alternative to legal action before the courts. Customers, however, may not want to arbitrate; instead they might

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[4] Consumer's Buying Guide, p. 14.

[5] "Today's Better Business Bureau: Force for the Eighties," a consumer information pamphlet of the Better Business Bureau.

regard the mediation process as a way to pressure businesses into a price reduction for a particular product or service. "Consumers may not be sensitive to the rights of others, especially the business community."

Financed by membership dues and subscriptions paid by businesses and professional firms in the community, the local Bureau provides services to businesses and consumers. Membership in the Bureau, which is deductible for tax purposes as a business expense, enables businesses to acquire information gathered locally or by the Bureau organization as a whole, Members have access to the following printed sources of the Bureau:

- The Bulletin, which covers the Bureau's activities
- Alerts, which are bulletin board notices that warn on schemes of the moment
- Trade Practice Bulletin, which covers special advertising problems and trade practice programs
- Confidential File Reports, which are special reports on firms and their activities. In this way members can check on questionnable promoters
- Fact Booklet Series, which cover consumer problems. These booklets do not tell people what to purchase or from whom to buy; rather they provide factual information about business practices as well as the goods and services that are available. It is hoped that consumers will then make informed decisions (see Appendix to this report for a sample listing of these brochures).

The local Bureaus themselves draw upon information contained in materials distributed by the Council, newspapers, and government publications, in particular those issued by the Federal Trade Commission and the office of the state attorney general. Other types of printed information are far less important; they were rated no higher than four on the scale of five. Bureau staff members, however, can take advantage of radio/television spots, personal contacts, and other means of advertising to inform the community about their function and activities.

THE SPRINGFIELD BUREAU

OVERVIEW

The Bureau serves western Massachusetts and the state of Vermont. The Worcester office takes care of central Massachusetts, while the Boston office handles the eastern part of the state. Selection of the Springfield office for study reflects a local Bureau operating within a rural, suburban, and urban environment. Businesses here have close contact with their customers and take pride in customer satisfaction and their reputation. They want the public to return to purchase new goods and services, and to recommend the company to their friends and associates. Businesses in more urban centers might be less concerned about their image and reputation. In these cases, the Bureau might be less effective as a mediator. The Springfield Bureau can monitor the mediation process and will refer the complaint to the appropriate consumer protection agency if it believes that the consumer has been defrauded.

The Bureau's office is located in downtown Springfield in a two room office. It is interesting to note that the door for gaining admittance to the office is locked and carries a sign informing the public to knock for admittance. At any rate, the staff consists of three people, the director and two secretaries /office workers. The public may deal with staff members over the telephone or in-person. Most often the dialogue is by telephone.

Since the Bureau is a "visible consumer agency" in the community, it is easy for the public to contact it. In many cases, citizens are unaware of the appropriate agency to contact. They might request operator assistance; if the operators cannot readily identify the appropriate agency, the query is usually directed to the Bureau. The bureau suggests that it can cut through "red tape" and put the consumer in touch with the right person within the business organization.

The local Bureau provides factual information to consumers, identifies consumer complaints, and may either mediate resolution of the problem or encourage arbitration. It may also refer consumers to the appropriate consumer protection agency. The provision of consumer information may be done in such a way that people will not feel that they are receiving an education. The past experience of the office staff suggests that labelling a program as consumer education may have a negative impact. People may equate education with formal schooling and, therefore, be unwilling to attend Bureau's sponsored programs. The Bureau actively carries its views and services to the community. Staff members speak before community groups, distribute Council pamphlets, engage in radio and television advertising, take advantage of the films and commercials prepared by Council headquarters, and arrange for business leaders to discuss different topics. Newspaper articles on the Bureau and word-of-mouth are the most effective means of advertising.

The Bureau offers an award to a business which has done something in the community "over and beyond" what is expected. The award is given on the basis of consumer recommendations and testimonials. The problem is that many consumers are unaware of the award and that the Bureau must advertise it inexpensively. Normally, advertising is accomplished by local newspaper coverage and television coverage.

GOALS

In relationship to the Bureau's goals, it was felt that the business community is aware of them (rated a one), while the general public as a whole is less so (rated a three). The goals are practical, achievable, and voluntary; for these reasons the questions about the extent that the goals are being achieved rated a two. The Bureau has developed plans to meet its goals (rated a two); however, it is difficult to correct popular impressions about business practices and the desire of the business community to take advantage of the public. The Bureau can make information available. The problem is that consumers might disregard the information; "people want others to think for them and they blame others if something goes wrong."

THE FIVE CRITERIA

In relation to the consumer services, the Bureau stresses the accuracy and understandability of its information. Up-to-dateness is viewed as a part of accuracy. Time is also a primary consideration; the Bureau often wants to bring the consumer and business together promptly in order to minimize any negative repercussions. The process of mediation and arbitration also reflects a concern about the cost in money. In summary, all five factors can be of major importance depending on the particular situation.

USERS

The Springfield Office staff believe that overall businesses and consumers are satisfied with the services that they provide. The staff find that businesses will inform the Bureau about their views on consumer complaints and their efforts to resolve the complaints. Businesses may also thank the Bureau for bringing a particular problem to their prompt attention. Consumers are less likely to volunteer their opinions about the resolution of a problem. Consequently, the Bureau sends consumers a "notice and verification of action" (see Figure 1) in order to determine that a problem has indeed been resolved. Other means for determining the effectiveness of the consumer information services are the number of referrals from the telephone company and other institutional sources, the number of repeat users, and the willingness of the business community to continue its membership. "Businesses would not continue to support us if they did not feel they got something from the relationship." Except for analyzing the forms depicted in Figure 1, the Bureau has not engaged in a formal evaluation of its consumer services. There is neither sufficient staff nor time to do such evaluation. "Our activities must center in other areas."

LIBRARIES

The role of libraries is viewed in traditional terms: information organization, dissemination, and referral. Bureau staff members telephone the reference department of the local library for addresses and telephone number of various businesses, organizations, and associations. They also refer consumers to the library for access to information resources conveying the results of consumer testing. It was also noted that libraries might acquire and make available consumer information pamphlets

Figure 1

BETTER BUSINESS BUREAU
NOTICE & VERIFICATION OF ACTION

CASE # ____________

DATE ____________

BBB

NOTICE

CONCERNING ________________________________
(COMPANY NAME)

☐ We have been advised by the company that action *has been* taken concerning your complaint.
(Please complete the verification section below and return this form to the BBB promptly.)

☐ We have been advised by the company that action *will be* taken concerning your complaint.
(Please complete the verification section below and return this form to the BBB when the company's action has been completed . . . OR after ____________ (date) if action is not taken.)

☐ See enclosure for the company's position concerning your complaint.
(Please complete the appropriate statements in the verification section below and return this form to the BBB.)

☐ The company has not responded to the BBB to date.
(Please complete the verification section below and return this form to the BBB promptly.)

☐ Please complete this form and return it to the BBB when you receive an answer to your complaint . . . OR after ____________ (date) if no answer has been received.

☐ See additional enclosure.

☐ We suggest: ________________________________

VERIFICATION
NOTE YOUR HELP IS NEEDED

A major function of the Better Business Bureau is to report to consumers its experience with various companies in their handling of customer complaints.

In fairness to the company about which you have complained, and other consumers who may inquire of the BBB about the company's reliability, it is important that we have an accurate record of the handling of your complaint. Please complete the appropriate statements below and return this form to the BBB promptly as directed.

HAVE YOU HEARD FROM THE COMPANY? YES ☐ NO ☐

IF NO. Have you contacted the company or taken any other action since initiating your complaint with the Better Business Bureau?

If so, please explain: ________________________________

____

____

____
(Skip to end, sign, date and return this form to the BBB)

IF YES. Date? ____________ Did the company offer any explanation or settlement?

Explain: ________________________________

____

____

IF A SETTLEMENT WAS OFFERED, HAVE YOU RECEIVED IT? YES ☐ NO ☐

IF NO. Check reason below:

☐ Was promised for a later date. (Indicate Date) ____________

☐ Company simply failed to perform as promised. (Explain) ____________

____

____

☐ Other ________________________________

____

IF AN EXPLANATION OR SETTLEMENT WAS OFFERED, ARE YOU (CHECK ONE) . . .

☐ BASICALLY SATISFIED (more satisfied than dissatisfied) OR ☐ BASICALLY DISSATISFIED (more dissatisfied than satisfied)

WITH THE COMPANY'S ACTION.

IF DISSATISFIED, WHY? ________________________________

____

____

SIGNED: ________________________________ DATE ____________

CBBB FORM VI June 1978

(NO ENVELOPE REQUIRED — FOLD AS DIRECTED ON REVERSE) issued by the Bureau. Local businesses might be persuaded to purchase and make these materials available gratis to libraries.

CONCLUSION

The Bureau is actively engaged in problem-solving, information dissemination, mediation, and information referral. It makes available the printed resources of the Council and monitors the materials distributed by consumer protection agencies. Consumer education, labeled as the provision of consumer information, is also a high priority. The purpose is to have the consuming public understand something before it acts. The Bureau can try to get a business to realize the possible consequences of its actions and to make voluntary changes.

APPENDIX

EXAMPLES OF THE FACT BOOKLET SERIES

COUNCIL OF BETTER BUSINESS BUREAUS, INC.
1150 Seventeenth Street, N. W.
Washington, D. C. 20036

AUG - 1 1980

PUBLICATION ORDER FORM

MINIMUM ORDER: One Hundred copies of each title

ONE COPY of tip publications available free of charge if accompanied by a #10 self-addressed stamped envelope.

(PLEASE PRINT CLEARLY)

SHIP TO: ______________________________
____
____
Attn: ______________________________

BILL TO: ______________________________
____
____
Attn: ______________________________

______________ Date ______________ Authorized Signature

PRICES DO NOT INCLUDE SHIPPING CHARGES

PLEASE DO NOT PREPAY You will be invoiced after shipment of materials.

______ Plaque (price on request)
______ Directory of Better Business Bureaus ($5.00 per 100)

7-80

ARBITRATION FORMS & PAMPHLETS

Arbitration Forms - $5.00 per 100

______ Consumer Arbitration Panel Data Sheet (NPM)
______ #1 Arbitration Agreement
______ #2 Notice of Appointment
______ #3 Notice of Hearing/Inspection
______ #4 Record of Hearing/Inspection
______ #5 Oath of Witness
______ #6 Subpoena
______ #7 Award

Arbitration Forms - $8.00 per 100

______ #8 Membership Certificate - National Panel Consumer Arbitration
______ #9 National Consumer Arbitration Logo Use
______ #10 Precommitment Form

Arbitration Pamphlets - $10.00 per 100

______ #11 Twenty Questions (and Answers)
______ #12 Sample Arbitration Cases
______ #13 Instructions to Arbitrators
______ #14 Arbitration for Business & Customers
______ #15 Preparing Your Arbitration Cases
______ #16 Arbitration for Business & Customers (Training Outline)
______ #17 Uniform Rules for a National Program of Arbitration

Arbitration (Miscellaneous)

______ #19 Arbitration Logo - Clip Art Sheet - (No Charge - Limit 10)
______ Arbitration Decals (Inside/Outside) $20.00 per 100 (no discount)

TIPS SHEETS - $6.00 per 100 (except as noted)

____ 01245 Appliance Service
____ 01206 Bait & Switch
____ 01211 Buying By Mail
____ 01283 Buying On Time
____ 01292 Car Care on the Road
____ 01248 Guarantees & Warranties
____ 01286 Mail Order Shade Trees
____ 01141 Home Insulation ($4.00 per 100)

TIP BOOKLETS - $15.00 per 100

____ 02139 Automatic Transmissions
____ 02247 Buying Used Cars
____ 02230 Carpet & Rugs
____ 02221 Drycleaning
____ 02293 Encyclopedias
____ 02140 Going Metric
____ 02216 Home Fire Protection
____ 02205 Home Improvements
____ 02106 Home Improvements (Spanish)
____ 02229 Home Study Schools
____ 02219 Mail Order Profit Mirages
____ 04113 Microwave Ovens
____ 02239 Multi-Level Selling Plans
____ 02111 Multi-Level Selling Plans (Spanish)
____ 02207 Refunds & Exchanges
____ 02107 Refunds & Exchanges (Spanish)
____ 02244 Renting A Car
____ 24146 Renting An Apartment
____ 02256 Roof Coatings
____ 02208 Sales Contracts
____ 02108 Sales Contracts (Spanish)
____ 02268 Slide Projectors
____ 02266 Water Conditioners
____ 02204 Work-At-Home Schemes
____ 02109 Work-At-Home Schemes (Spanish)

TIP BOOKLETS - $20.00 per 100

____ 24154 Buying A Home
____ 24153 Buying Furniture
____ 03246 Car Repair
____ 03201 Central Air Conditioning
____ 03238 Health Insurance

TIP BOOKLETS - Special Pricing

____ 03232 Computer Careers ($13.50 per 100)
____ 03250 Hearing Aids ($23.00 per 100)
____ 04135 Home Insulation ($18.30 per 100)
____ 24155 Life Insurance ($17.00 per 100)
____ 03227 Mobile Homes ($16.20 per 100)
____ 02217 Saving Energy ($17.65 per 100)
____ 03255 Selecting A Franchise ($12.80 per 100)
____ 03235 Shopping for Food ($43.15 per 100)
____ 24142 Solar Energy for Your Home ($24.15 per 100)
____ 24151 Swimming Pools ($25.00 per 100)
____ 24157 Consumer Credit ($19.50 per 100)
____ 24158 Automobile Insurance ($16.60 per 100)
____ 24159 Residential Alarm Systems ($16.65 per 100)
____ 24161 Pest Control ($ 24.35 per 100)
____ 24260 Interstate Moving ($ 33.30 per 100)

STANDARDS

____ 24144 Automobiles & Trucks ($19.50 per 100)
____ 24143 Carpet & Rugs ($17.80 per 100)
____ 25129 Charitable Solicitations (Available from PAS)
____ 25125 Code of Advertising ($17.65 per 100)
____ 24156 Federal Energy Tax Credits-Advertising Guidelines ($5.00 per 100)
____ 25131 Home Improvement Industry ($20.00 per 100)
____ 24138 Home Insulation Materials (not avail. at this time)
____ 24152 Household Furniture ($25.25 per 100)
____ 24148 Residential Swimming Pools ($23.30 per 100)

BBB INFORMATION - $7.00 per 100 (except as noted)

____ 22124 Four Reasons Why
____ 22296 History & Traditions of the BBB
____ 22105 What is a BBB
____ NARB If You Have A Complaint About Advertising
____ CARU An Eye on Children's Advertising ($18.00 per 100)

SPECIAL

____ 24147 Schemes Against Business ($9.80 per 100)
____ 25132 Holder in Due Course (30¢ each)
____ 24145 Solicitations in the Guise of Invoices ($8.70 per 100)
____ 25134 Advertising & the F.T.C. Act (25¢ each)
____ 25137 The American Economic System (25¢ each)
____ 25136 The Warranty Law ($23.30 per 100)

FREE OF CHARGE (100 copy limit)

____ Federal Reserve Board-Truth in Lending

CASE 7

CONSUMER EDUCATION RESOURCE NETWORK (CERN)*

InterAmerica Research Associates, Inc., is a management and consulting firm, which maintains six clearinghouses for government agencies on a contractual basis:

- Consumer Education Resource Network
- National Clearinghouse for Bilingual Education
- Service Center for Aging Information (SCAN) - Central Control Facility
- National Digestive Diseases Education and Information Clearinghouse
- National Health Information Clearinghouse
- Sudden Infant Death Syndrome Clearinghouse

The Consumer Education Resource Network (CERN), which is funded by the Office of Consumers' Education, U.S. Department of Education, serves as a national network to meet the information needs of consumer educators and to further cooperative efforts among consumer educator interests. (1) More specifically, CERN serves consumer educators within:

- community-based organizations
- state and local education agencies
- institutions of higher education and local school systems (including academic libraries)
- Federal, State, and local government agencies (including public libraries)
- national, state, and local business, trade, professional, and education associations
- national, state, and local consumer organizations
- private industry

As depicted in Figure 1, the organizational structure of CERN would show the network headquarters in the center, with a formal and informal relationship to the seven main target groups. CERN promotes linkages among the seven groups and tries to get them to work together more effectively. The network gathers information from a variety of sources and makes it available to these groups in a usable fashion. CERN staff members may also draw upon the resources of other organizations, clearinghouses and commercial databases.

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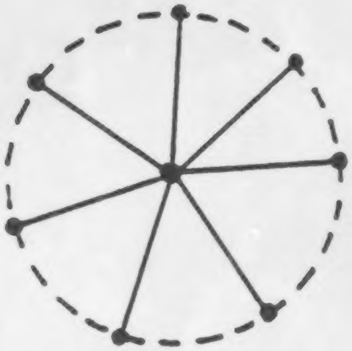
[*] This report is based upon an interview, conducted December 8, 1981, with three members of the CERN staff: Nancy Nolf, Associate Director; Dianna Kemp, Information Services Coordinator; and Janet Cochran, Data Base Searcher. CERN is located at 1555 Wilson Blvd., Suite 600, Rosslyn, Virginia 22209.

[1] "Consumer Educators Call CERN for Help," ConCERNs 3 (January 1981): 1.

Figure 1: Organizational Structure of CERN



GOALS

Network goals focus on meeting the information needs of consumer educators. CERN staff members were asked about how well network goals are defined and communicated. They believe that members of the network have some awareness of the goals (rated a three on a five-point scale). Undoubtedly people are most aware of the network's dissemination of information role. Awareness of the various activities varies among the seven target groups and whether training programs have been developed for a particular target group. End users (actual consumers) are probably unaware of the goals (rated a five); however, it is not CERN's mandate to deal directly with ultimate users and their information needs. Staff members think that network goals are being achieved (rated a two) and that CERN has developed plans to meet its goals.

Those staff members interviewed were asked about network priorities relating to specific activities. They rated information dissemination and referral, as well as consumer education the highest (all given a one on a five-point scale). Information acquisition and organization rated a three; budgetary cutbacks from the Federal Government are making this activity less of a priority. Document delivery and information interpretation/ /advice were given a four. It was noted that staff members might interpret information but that they did not make recommendations or offer advice. For example, they might compile a list of possible organizations from which speakers could be solicited. However, consumer educators must select which organizations to contact. Advocacy, problem-solving, and lobbying were all regarded as outside the perview of this Federally-funded project. Once Federal funds cease, the picture might change.

ACTIVITIES

Begun in October 1978 as a three-year developmental effort, CERN is based on the premise that an abundance of information is available but that much of it is not easy to find. The network, therefore, identifies and collects current information on consumer education; provides reference and referral service to consumer educators; maintains ConCERNs, a newsletter published eleven times per year and offering articles and news items of interest to consumer educators; (see Appendix for a specimen copy); conducts training sessions relating to various aspects of consumer education; and provides technical assistance in program planning, implementation, and evaluation. Requests for information are received primarily by mail or the toll-free telephone number (800-336-0223); (2) in-person requests are only occasionally made.

Consumer education may be defined as "education about what the marketplace is, how to function in it, and how to affect change in it." Consumer educators consist of "Anyone who provides information to help people become better consumers... Consumer educators wear many hats, and they may include news media reporters, social service staff members, county extension agencts, corporate consumer affairs coordinators, government employees, individuals conducting informal workshops, and others." (3)

In meeting the information needs of client groups, CERN staff members have access to a small collection of books, periodicals, pamphlets and booklets, newspaper articles, and government publications. Staff members have on-line access to these resources, as well as to bibliographic data bases of the public and private sector (e.g., Magazine Index and the ERIC files). In addition, they maintain a human and organizational resource (also on-line) files from which they can make referrals.

Instead of specifically answering questions, staff members most typically provide bibliographic data plus assistance on the location of sources. They produce a list of relevant citations which their clientele could obtain from their local library, inter-library loan, direct order, or other means. Staff members will, however, make recommendations as to the various options for acquiring needed source material. If the sources are no longer in print, CERN will also provide copies.

Clients receive the necessary citations within ten working days from the time the request is received. It should be noted that "CERN information specialists are willing to help consumer educators in all phases of their search, from referring ideas about the kinds of materials needed to location of those which will answer their needs." If users experience problems in

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[2] Persons in Alaska, Hawaii, and Virginia can call collect on (703)522-4616. Those in the metropolitan Washington D.C. area should call 522-4616.

[3] "Consumer Educators Call CERN for Help" ConCERNs 3 (January 1981): 1.

finding the required materials, CERN staff members will provide assistance. "Since the CERN staff does the legwork of locating appropriate materials, consumer educators can focus their energy on closely reviewing the materials they order and applying what is learned." (4)

Staff members may do telephone follow-up in order to determine if the resources were indeed useful. If the references did not help, additional assistance will be provided. CERN staff members maintain a record of all requests for information. As noted in the Appendix, the form indicated whether or not the consumer educator was referred, the kind of information sought, and the purpose for which the information is needed. In addition, every fourth information request (a 25 percent sample) is selected thirty working days after dissemination of the requested information, and the requester is sent an evaluation form (see Appendix). Only 15 to 20 percent of these forms are completed and returned. Staff members at CERN are currently revising the form in an effort to generate a higher response rate.

The reference and referral services are provided free of charge to consumer educators. Users, however, may have to pay the cost of computer search time if a data base other than CERN's is searched. It might be noted that:

> "CERN will research almost any type of information request that will help consumer information specialists to do a better job. Requests from individual consumers cannot be handled."
>
> "Since CERN does not want to duplicate services already available, college students and faculty are urged to use research services offered through their campus libraries. In addition, they may check to see how CERN can supplement those services " (5)

At this point it might be beneficial to report some of the reference questions received by CERN staff members. Teachers wanting to start a new course or modify existing curriculum might want to teach their students about buying used cars. In this regard, they might want a list of materials that could be ordered as well as information on available films. (6) Local consumer advocacy groups might request a list of free consumer education pamphlets that can be ordered in large quantities. In another case, a college professor wanted speakers from within a 100 mile

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[4] "Clearinghouse Contains Materials, Information," ConCERNs, 3 (January 1981): 2.

[5] "Placing a Request: It's a Snap!" ConCERNs, 3 (January 1981): 3.

[6] "Consumer Educators Call CERN for Help," p. 1.

radius of the campus to address his class on energy alternatives. Lists of potential speakers can be prepared. However, requesters must review all lists, select relevant speakers, and follow through with the contact. (7) Resource lists can also be compiled for audiovisuals and print sources. Some of the other sample information requests are as follows:

- "We're thinking about submitting a grant proposal on consumer problems of the handicapped. Has anything already been done in that field?"
- "What is the best way to convert low income housing to cooperatives?"
- "I work for the state attorney general's office, and we are planning consumer education workshops for senior citizens. Can you find some information about special problems of elderly consumers?"
- "What universities offer a consumer science degree?"
- "I'd like a list of community colleges that are doing innovative things in consumer education."
- "Our consumer association wants to form coalitions with other groups concerned about energy issues. Please send the names of such organizations in my state and neighboring states."

However, it should be remembered that "CERN is a clearinghouse rather than a lending library." Most typically requesters, therefore, receive lists of available materials rather than the actual materials.

INFORMATION RESOURCES

CERN maintains a collection of materials (print and non-print) as well as information on organizations and institutions. (See Appendix for sample entries). The materials' collection comprises a computerized information system in which each item has been evaluated and the price, availability, and ordering information determined. This collection, which dates back to 1976, consists of a variety of resources (e.g., curriculum guides, research reports, and position papers) taken from monographs and reference works, government publications, etc. More than 1,000 organizations have supplied information resources that CERN has added to its computerized file.

In providing consumer education services, CERN staff members find books, newsletters, government publications, booklets and pamphlets (e.g., those produced by cooperative extension services, consumer protection groups, and community based organi-

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[7] "Consumer Educators Call CERN for Help," p.1.

zations), newspapers and personal contacts most useful; all these types of information services are rated a one. Information obtained from government agencies was accorded a two, while journal articles and placement on mailing lists of agencies, etc. rated a four. Trade publications and radio/TV spots were least useful; both rated a four.

CERN tries to find out about consumer education projects and research efforts that are in progress so that they can pass such information along to interested consumer educators. As CERN's staff notes,

> "Network is...[our]...last name, and information on materials, organizations and institutions, and projects is essential for CERN to truly promote networking and the interaction of consumer educators nationwide." (8)

TRAINING PROGRAMS

CERN is currently exploring different ways that groups can use new technologies for professional development. For example, three authorities on the National Consumer Cooperative Bank participated in a panel discussion of the bank's services, which was partially supported by CERN. Panelists were connected by a conference call to individuals located at various sites throughout the nation. A question and answer session followed the formal presentation.

Consumer information specialists participated in a computerized conference using the Electronic Information Exchange System (EIES). Communicating through mini-computer terminals, the specialists showed trainees how to reach a group consensus on a major issue, jointly draft reports, as well as send and receive messages. Additional training methods might relate to such technologies as cable television systems, telecommunication, closed circuit talk-back television, electronic mail, and picturephone conference calls.

It is the intention of CERN "to be the resource for information on application of these new technologies to consumer education." (9) In order to do this,

> "Staff members at CERN will assist other groups in their experimentation with new training technologies. They can provide information on costs and making arrangements with such groups as cable TV stations or the telephone company, as well as offer direction on planning

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[8] "Materials, Information Needed," ConCERNs, 3 (January 1981): 4.

[9] CERN tries Innovative Training Methods," ConCERNs, 3 (January 1981): 3.

> innovative training activities."
>
> "Through regular CERN information requests, resource lists are provided about training guides, handout materials, and organizations which can provide speakers or trainers."
>
> "As another way to provide assistance in training, CERN will be reviewing numerous films and audiovisuals that could be used in consumer education workshops or classrooms. Based on the assessments, CERN staff will identify audiovisuals for use by requesters." (10)

STAFFING

CERN has thirteen staff members. There are six full-time and four part-time, professional staff members. In addition, two persons are secretarial support and one handles data entry. All professional staff members are engaged in public service activities. This is even true of the director. As noted in the interview, "we all have some managerial responsibilities."

Three of the professionals hold baccalaureate degrees, while two are in the process of obtaining master's degrees. Four professionals have master's degrees in either library and information science or home economics. The final member of the professional staff has a doctorate.

Staff members received special training concerning the provision of consumer information and the art of interviewing. They each received on-the-job training. A person in training shares an office with an experienced member of the staff. In this way, trainees receive feedback on search strategies and their ability to elicit specific information needs. The objective is to make them specialists in consumer education resources.

Staff turnover since the beginning of 1980 could be characterized as high. Employment is at the entry level, with little opportunity for advancement within a consulting firm. Further, there are few employee benefits which are conducive to long term employment. However, since the contract with the Office of Consumers' Education has been for three years, there is a higher degree of job security than for those situations in which the contract is for only a few months. The number of staff for the next couple of years is expected to decline due to the demise of the Office of Consumers' Education. As one interview subject explained, "we will stay alive but will have to go through a lean period in which we rebuild."

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[10] *Ibid.*

FUNDING

The entire budget is dependent on Federal grants. Excluding administrative and overhead costs, the entire network budget for the last fiscal year was allocated to public service. The largest budgetary category is for information and referral service. Next in importance are training services and on-line bibliographic services. Only a small percentage of the budget is devoted to document delivery; the actual items are furnished only if they are not available elsewhere. The budget for the next fiscal year will undoubtedly include an increase for information and referral services as well as greater attention to publicity. There will be a decrease in on-line bibliographic services, due to the demise of Federal funding. Staff members will encourage their clientele to have computer searching performed at their local libraries if these institutions have the capability.

The three year contract with the Office of Consumers' Education ended in 1981. An eighteen month extension, however, carries the network until March 1983. At that time outside support must be available or the network terminates. Realizing that the Office of Consumers' Education would soon be abolished, its staff transferred some of their services to CERN and provided the network with greater flexibility in setting its programs. As the interview subjects admitted, "the spirit of the Office will live through CERN."

By January 1982, CERN wants to develop a plan by which it can seek outside funding. Initial efforts will be directed toward finding a "safe house" in the Federal Government, perhaps with the military, post office, or Department of Labor. As an alternative, CERN might be located within a business, foundation, university, or educational association. Staff members at CERN are already opening dialogue with its target audiences, in an effort to gain support and advice on the most appropriate location for the network.

PUBLICITY

CERN attempts to maintain high visibility locally, regionally, and nationally. It has established contact with the Office of Consumer Affairs within the White House, has formal and informal meetings with local groups and individuals interested in consumer education, and maintains contact with state consumer education centers in Michigan, Oklahoma, and Wisconsin. In addition, by extending sub-contracts to organizations such as the Consumer Federation of America and the Coalition for Consumer Education, these groups have a vested interest in wanting see CERN survive and flourish. Staff members at CERN also attend local and national conferences, attend meetings held by Federal offices responsible for consumer education, and serve on boards and committees of groups such as the Joint Council for Economic Education. As explained by the staff members interviewed, "we try to meet the key people and to get the most for the dollars expended." For each of the seven target groups that CERN attempts to serve, publicity is targeted at key organizations and "change agents." In this way, it is believed that publicity can be effective; consumer educators will associate CERN with their information gathering.

CERN has developed a marketing plan to reach consumer educators rather than consumers themselves. Staff members have compiled a mailing list of 4,500 organizations, groups, and individuals representing the seven target audiences. They prepare and distribute flyers on new publications, do a special mailing to one of the target audiences around a specific subject, as well as issue the newsletter, ConCERNs. This newsletter represents the most effective means of publicity. In addition, staff members attend, speak at, and prepare displays for various conferences. They have also inserted publicity blurbs in magazines including Senior Scholastic and Changing Times. Such efforts result in "a lot of response. With the loss of Federal support, however, we must be careful about how many requests are generated." Due to the demise of Federal support, CERN is being careful about the publicity programs it undertakes.

USERS

CERN has completed a feasibility study in which a needs assessment of target audiences was made. In addition, data on users are gathered from the information gathering forms and the evaluation forms. The network has also been included in a subcontract for the Coalition for Consumer Education. Such studies as well as the information reported on the data gathering forms indicate that members of the target audience appreciate the handling of their information needs on an interpersonal basis. They also appreciate "friendly, fast, courteous, and efficient service." It might be noted that if staff members locate needed information in a printed source, or discover a possible referral source, they always verify its accuracy prior to its delivery to the requester.

Staff members have devised methods for determining the effectiveness of their consumer education services. First, analysis of their data gathering forms reveals that two-thirds of the users have made previous use of the CERN services. Secondly, evaluation forms are sent to every fourth user. Thirdly, users may occasionally telephone their appreciation of the service provided.

THE FIVE CRITERIA

The staff members interviewed were asked about the importance of the five factors in providing consumer information services. The accuracy of the answer was rated highest in importance. Next in overall importance were the understandability of the answer and the up-to-dateness of the information. The time that it took to find the information rated fourth, while the cost in terms of money was least important.

ROLE OF LIBRARIES

By gathering and disseminating information, especially in the form of bibliographic references, CERN performs a role similar to that of libraries. The staff members interviewed suspect that the success of the network might be testimony in part to the fact that libraries have not met the information needs of consumer educators in an effecitve and efficient way. Undoubtedly many libraries have not collected as extensively in the area of consumer education as they might have. Further, CERN combines the talents of people with backgrounds in consumer education and library and information science. Perhaps libraries might reexamine some of the specialties and expertise held by their staff. The objective might be to cover additional areas, such as consumer education.

Staff members interviewed saw libraries playing a definite role in the area of consumer education services. In their opinion, libraries should be most involved in information acquisition, organization, dissemination, and referral; as well as document delivery (all these activities rated highest priority). They noted that networks such as CERN would not be effective if libraries did not provide the necessary backup service -- the provision of the source material identified from a search of the CERN files. Those interviewed rated consumer education as an important function for libraries (rated a two). The remaining activities were considered as unimportant. Information interpretation/advice was given a four, while advocacy, lobbying, and problem-solving were all rated least important or a five.

CERN staff members noted that libraries make infrequent referrals to their resources. It seems that they are "unaware of us." Staff members, however, do consult libraries for information, especially that contained in directories not held in the CERN library. Staff members verify sources of referral prior to actually making a patron referral. They believe that libraries could make more use of referral by going into human resources and social services. Having access to a WATS line enables the staff to do some searching for information, as well as verification, which they otherwise might not. They will contact a person within the organization or agency to which they anticipate referring a consumer educator and alert him to expect a telephone call from that person. They will also confirm that the referral is appropriate. Consequently, they believe that referred sources are successful in meeting the information needs of consumer educators.

The policy of CERN is to do whatever is necessary to obtain needed information, within time and financial limits. These limitations, however, become less important when CERN staff members believe that the desired information may make a potential impact on the field of consumer education and generate publicity for the network. For example, they will go to greater lengths to gather and disseminate information that could have an impact on legislation than they will to satisfy the information needs of individual teachers. It might be noted that actual provision of materials is more costly than ascertaining bibliographical references and appropriate referral sites.

CERN is willing to devote the time necessary to meet the information needs of its target audiences. It also has a staff which specializes in identifying and providing access to consumer education resources. As those interviewed noted, "full-time can be spent learning about referral sites and supplementing print and non-print resources." They believe that libraries could extend themselves in consumer education to take on the role of local information centers. Perhaps CERN, in the future, might be able to assist libraries in expanding their role as providers of consumer information. There could definitely be a partnership between CERN and the library community. CERN, for example, could focus on provision of bibliographic references while libraries could make the source material available.

Libraries need to keep abreast of the "information revolution" and to help educate the public about the value of new technology. They can make available a menu of community services, which the public could gain access to through home computers and cable television. In this way, consumers should be able to do comparison shopping (e.g., compare car and grocery prices). At the same time, libraries can increase their information and referral functions for the benefit of those people who do not have home computers.

ADDENDUM

Since the interview was conducted, CERN has divided its operations into three components:

- Information Services
- Informtion Systems
- Publications.

The Information Services component handles all information requests, WATS line calls, and database searching. Information Systems incorporates the development of an internal data base for consumer information, while the Publication component produces CERN publications.

CERN has undergone some major staff changes since the interview was conducted. Both Nancy Nolf, then the Associate Director, and Dianna Kemp, then the Information Services Coordinator, resigned from the staff. Dr. Charles Cheney, the Project Director, handles the overall administration and coordination of CERN. Obviously, the loss or decrease of the Federal support has been the major cause of these changes.

APPENDICES

A SAMPLE ISSUE OF CONCERNS
CERN SERVICES EVALUATION
CERN SERVICES REQUEST FORM
CERN BIBLIO FILE
CERN ORG FILE

Volume Two, Number Ten, December 1980

CONCERNS

Consumer Education Resource Network

Funding and the Consumer Educator

With the national economy as tight as it is, administrators are facing increasing difficulty in finding financial resources to fund their programs. In an effort to balance a stringent budget, Congress looks for programs to cut and programs throughout the country are noticing the effects. Funding agencies of every type are feeling the economic pinch, and as a consequence, competition for shrinking dollars is increasing.

For this reason, it behooves any organization to examine closely its fundraising and grantsmanship skills. There is still funding available for projects, if the fundraiser knows how to go about securing it.

An excellent resource for developing a fundraising strategy is a manual for citizen groups entitled *The Rich Get Richer and the Poor Write Proposals* written by Nancy Mitiguy for the Citizen Involvement Training Project. Outlining the process of developing a funding strategy from beginning to end, the manual provides basic information, exercises, and activities to use in developing a fundraising strategy, and offers references to check for further information. The following is based largely on information gathered from this manual, supplemented by materials published by the Grantsmanship Center and the Foundation Center and by observations particularly relevant to consumer educators.

Planning: The key to successful fundraising.

Any successful fundraising campaign depends on careful planning, which sometimes needs to begin with the very nature of the organization. Organizational purpose, long-range goals, proposed activities and projects, and their relationship to each other should all be clearly understood. Unless an organization can convince a prospective funding source that it is committed to the project for which it is seeking funds and has the resources to carry it out, the request for funding has little chance of success. Furthermore, a grant may have strings attached to it. If the goals of the granting organization are not compatible with those of the grantee, an organization may find that in accepting funds it is no longer doing what it set out to do or believes it ought to do.

Investigating funding sources

The next step is to investigate the different types of program funding available as a basis for determining which would be most appropriate for the organization. There are basically two ways to raise money: grass roots fundraising and grant acquisition.

Grass roots fundraising: Grass roots fundraising is defined by Joan Flanagan, author of *The Grass Roots Fundraising Book*, as "all the ways to make money using your own members and your own resources." It includes membership dues, proceeds from fundraising events, direct mail solicitation, and door-to-door canvassing. Particularly suited to the nature of community-based organizations, it is frequently their main staple. The constant planning, organizing, and hard work that it requires, however, causes many organizations to consider abandoning it in favor of a grant-seeking campaign. But the process of securing a grant also requires a lot of time, energy, and effort. Furthermore, since grants do not last forever, it can also be an ongoing process. The many advantages of grass roots fundraising derive primarily from the independence and public support which the nature of these types of activities bring to an organization.

Grantseeking: The other major way to raise funds is through grants, especially suited to the funding of research and educational activities. Grants may be made by the government, private foundations, churches, or corporations. A discussion of the two biggest potential sources for consumer educators — the government and foundations — is presented below. Corporations and churches should not be ignored as potential sources, however. Businesses often recognize the importance of an informed consumer public and churches are particularly willing to fund programs for the poor — a target population for many consumer education programs.

- *Government:* The federal government is by far the largest spender of funds on grants and one of the first sources occurring to a grant seeker. For this reason, competition for federal dollars is extremely strong. This year, the U.S. Office of Consumers' Education (OCE) awarded 59 grants; but for every award made, more than ten applications had to be turned down. It should be noted, however, that OCE is not the only federal department to which administrators of consumer education programs could apply for funds. The complexity of the federal government — with its multitudinous bureaus, agencies, and departments — offers numerous possibilities to any grant seeker. CERN will soon release an update to its *Consumer Education Resource Inventory*, which will identify and describe federal funding sources of particular interest to consumer educators.

The basic documents for researching federal funding sources are the *Catalog of Federal Domestic Assistance*, listing more than 1,000 federal agency programs offering technical assistance and loans as well as grants, and the *Federal Register*, which follows the rule-making processes of all federal government agencies, including provisions for grants.

Many experienced fundraisers and experts in the field believe that researching the documents is not nearly so important as establishing contact with federal agencies appropriate to the grant-seeker to find out about recent developments, new programs, funding priorities, etc. Most publish information about their grants programs. In addition, both local and national U.S. Congressional offices are important sources of information.

- *Foundations:* There are approximately 25,000 foundations in the United States, varying widely in terms of structure, size, and what they are willing or able to fund. The Foundation Center is the primary organizational resource to use in researching foundations (see References, p 3). In investigating foundations, fundraisers should look for those which have funded projects similar to their own; those which have funded projects in their geographic area; and those which make grants for amounts appropriate to the needs of the grantseeker.

Determining the most appropriate funding source:

After identifying prospective funding sources, the next step is to determine which

See **FUNDING,** *next page*

FUNDING, *continued from page 1*

would be best suited to the organization seeking funds. Questions to consider in doing so are:

- How closely does this funding source match your program philosophy?
- Will funding from this source help meet your most critical need?
- Realistically, do you have a chance of getting funding from this source?
- Is the time and cost required to get funds worth the anticipated level of funding?

Proposal Preparation

Acquisition of a grant requires preparation of a proposal. For foundations, the proper form is usually a letter, while for the federal government it is usually a detailed set of forms. But whatever the format, the proposal needs to convince the prospective funding source that the proposed project is worthwhile and that the applicant is capable of carrying out the project. Reviewers frequently complain that they receive proposals for projects that have obviously not been thought through. Some, for example, betray a lack of familiarity with the field in which the project would be conducted, perhaps even proposing to repeat a study that has already been done. Some show that need for a project has been based on assumption rather than actual investigation. Sometimes the described project could not possibly be done in the amount of time allotted with the resources described. Whatever the prospective funding source, all proposals should have the following characteristics:

- They should document the problems which the project is designed to address for the geographical target area of the project;
- They should show that the organization has investigated previous similar work in the field and explain how the project will relate to it or be different from it;
- They should show that the project has been clearly defined and is not beyond the scope of the organization; and
- They should state goals in measurable and realistic terms, based on actual research.

Some grantseekers make multiple copies of their proposals and distribute them indiscriminately. Most experts strongly advise against this practice as a waste of time and money, since a proposed project needs to be suited to the type organization to which application is being made.

Followup

If a few weeks have elapsed after proposal submission and there has been no response, it is advisable to follow up with a phone call to find out if there has been a chance to review the proposal or if any questions need to be answered, etc. Once a decision has been made, if the request has been denied, it is important to find out why so that future mistakes can be avoided.

There is a great deal more to be said about the subjects of fundraising and grantsmanship; however, the main thing to remember is that fundraisers must do their homework. An organization seeking to fund a project must be able to demonstrate that it meets a real need; it must find out which sources are best suited to and most likely to fund the project; and it must determine the best ways to approach these sources.

FOCUS On Programs in the Network

The Michigan Consumer Education Center: Negotiating the Path of Soft Money

Although established with government educational funds, the Michigan Consumer Education Center (MCEC) grew out of an idea originating in the banking and credit industry. A group of Michigan bankers and credit counselors, perceiving the need of the general public for basic information about banking, financing, and credit, decided that there should be an institution through which this type of information could be provided. The idea for such an institution was broadened to include other aspects of consumer education, and a proposal was written by the Education Committee of Credit Counseling Centers for a center which would further the interests of consumer education through teacher education, provision of consultant services, and maintenance of a resource library. The Center was established in 1973 with state vocational education grant funds for consumer and homemaking education at Eastern Michigan University.

Since that time, MCEC has received funding from a variety of sources, including: Eastern Michigan University, the National Bank of Detroit, the Montgomery Ward Company, the Mott Foundation, the association of Michigan economic education centers, and the U.S. Office of Consumers' Education. Given the multiplicity of funding sources, the question arises: How does one negotiate the path of "soft money" without sacrificing program integrity? Could not acceptance of funding from all those different sources have changed the Center beyond all recognition? Has it not had difficulty in maintaining program continuity?

The answer is that while MCEC has broadened in scope since its inception, and while it has been influenced to some degree by its various funding sources, its basic mission has not been compromised. Indeed, the influences of the funding sources have for the most part been healthy ones.

There are three factors which have served MCEC well in remaining true to its mission to improve and extend the quality of consumer education in Michigan. The first is that it has a firm understanding of and commitment to its goals and purposes. The second is that it chooses prospective funding sources which will not do damage to its mission or destroy continuity. And the third is that it is aware of the goals and purposes of any sources from which it accepts funds.

Sometimes MCEC has received criticism for taking money from business — often seen as "the enemy" of consumers' interests. Perhaps because it grew out of an idea originating in the business community, MCEC has never regarded industry in this light. Its philosophy has been that there should be cooperation between the private and public sectors. To be sure, it has had to keep in mind the goal of industry — to make a profit — when it takes industrial funds. It does not want to imbue its educational programs with an industrial bias. But over the years, this has presented little problem. When, for instance, MCEC conducted a consumer economics forum with Montgomery Ward funds, both industrial and consumer activist interests were represented. Ward's did not in any way try to interfere with the objectivity of the program.

Sometimes the perspective of business has been needed, particularly in the area of jobs development programs. In addition, through its various contractual and grants arrangements with representatives of the private sector, the Center has been able to have some influence on the thinking of the business community.

There are pitfalls, however. Sometimes it is all too easy to consider the funding source in preparation of materials or programs; to omit something which reflects unfavorably on the industry of a funding source. It is then that MCEC must remind itself of its commitment to quality programs and say what needs to be said. Up until now, it has done this with impunity. It is probably the fact that its approach to the industrial sector has always been a cooperative and communicative one which has allowed it to do so.

References

Bibliography of cited references

The Rich Get Richer and the Poor Write Proposals by Nancy Mitiguy for the Citizen Involvement Training Project, University of Massachusetts, 138 Hasbrouck, Amherst, Mass. 01003, 1978. $6.00 plus postage.

The Grass Roots Fund Raising Book: How to Raise Money in Your Community by Joan Flanagan. Chicago: The Swallow Press, Inc., 1978. $5.25.

Catalog of Federal Domestic Assistance, published by Office of Management and Budget yearly and updated twice annually. Subscriptions $20 per year from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Federal Register, published every weekday except holidays. Subscription $75 per year from Superintendent of Documents (see address in above listing).

Organizations cited

The Grantsmanship Center. Offers courses in grantsmanship at its offices and various locales around the country; publishes *The Grantsmanship Center News* (bi-monthly, $20.00 per year; selected reprints available). Course schedules and other information available from The Grantsmanship Center, 1031 S. Grand Ave., Los Angeles, Calif. 90015, (213) 749-4721.

The Foundation Center. National foundation-funded organization matching foundation interests with non-profit needs. Maintains four main libraries with eighty cooperating libraries around the country. Publishes the *Foundation Directory* and other foundation indexes as well as books and pamphlets on all aspects of foundation grantsmanship. Main library locations: 888 7th Ave., New York, N.Y. 10019 (212) 975-1120; 312 Sutter St., San Francisco, Calif. 94108 (415) 397-0902; 1001 Connecticut Ave., N.W., Suite 938, Wash., D.C. 20036 (202) 331-1400; and 739 National Bank Bldg., 629 Euclid Ave., Cleveland Ohio 44114 (216) 861-1993. Further information and listing of cooperating libraries available from any of the above addresses or by calling toll free 800-424-9836 (331-1400 if calling from Washington, D.C. area).

Other print materials to consult

Getting a Grant: How to Write Successful Proposals by Robert Lefferts. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1977, $4.95. Directed specifically toward writing proposals in the field of human services.

Grants: How to Find Out about Them and What to Do Next by Virginia White. New York: Plenum Press, 1978, $19.50. Good overview for identifying funding sources and developing fundraising strategy.

See **References**, *page four*

CERN ORDER FORM

Following is a list of publications available from CERN; they carry a minimum charge to cover cost of reproduction and mailing only.

No. of copies	Total Price	
____	____	• *Education of the Consumer: A Review of Historical Developments* by L. Gayle Royer and Nancy Noll traces the history of consumer education through 1978, identifying problems and needs. June 1980. Price: $2.00.
____	____	• *Consumer and Economic Education (K-12): A Comparative Analysis* by Gayle Royer Trujillo describes a model for consumer education content for K-12 programs. March 1977. Price: $2.00.
____	____	• *Consumer Education Resource Inventory*, a guide to 90 organizations which serve as resources for consumer educators. Contents expanded three times yearly at no additional charge. Price: $10.00.
		• Selected Bibliographies ($1.00 each):
____	____	1. Credit
____	____	2. For and about the Elderly
____	____	3. Secondary Level Curriculum Materials (for teachers)
____	____	4. Secondary Level Textbooks (for students)
____	____	5. Food Shopping
____	____	6. Clothing Buymanship
____	____	7. College Level Textbooks
____	____	• *ConCERNs*, the CERN monthly newsletter containing articles, event notices, and refrences on consumer education nationwide. Price: No charge to most consumer educators; $25.00 per year to business and business associations.

Name ______________________________

Address ______________________________

____

Zip ____________________ Telephone ____________

Purchase Order No. ____________ Amount Enclosed ____________

Mail this order form with purchase order, money order, or check to:
CERN, 1555 Wilson Blvd., Suite 600, Rosslyn, Va. 22209.

Consumer Education Resource Network

Calendar of Events

December 12-14	SIXTH NATIONAL CONSUMER SYMPOSIUM (Tucson, Arizona). "Consumerism: Change in the Marketplace." Contact Dr. Currin V. Shields, Director, National Consumer Symposium, Inc., Box 40445, Tucson, Ariz. 85717 (602) 626-4856.
February 17- April 30	Series of 20 consumer workshops on the Principles and Economic Feasibility of Solar Energy to be held at different locales throughout the country. Sponsored by the U.S. Dept. of Housing and Urban Development. Contact David Ambler, National Solar Heating and Cooling Information Center, P.O. Box 1607, Rockville, Md. 20850 (202) 223-8100.
February 18-22	ANNUAL CONFERENCE, Association for Children and Adults with Learning Disabilities, Atlanta, Ga. "Coming of Age." Contact Association for Children and Adults with Learning Disabilities, 4156 Library Road, Pittsburgh, Pennsylvania, 15234, (412) 341-1515.
April 8-11	Twenty-Seventh Conference, American Council on Consumer Interests, Minneapolis, Minn. "The Consumer Movement as Related to Other Social Movements." Contact ACCI, University of Missouri, Columbia, Mo. 65205 (314) 882-3817.
May 17-19	EASTERN CONSUMER CONFERENCE, Wheeling, West Virginia. Contact Dr. Louis Meyer, Institute for Community Services, Edinboro State College, Edinboro, PA 16444, (814) 732-2451.

ConCERNs is published eleven times a year to facilitate the exchange of information and ideas among consumer educators nationwide. It is published by the Consumer Education Resource Network, a project funded by the Office of Consumers' Education, and operated by InterAmerica Research Associates, Inc. pursuant to contract HEW 300-78-0575. The views expressed in *ConCERNs* do not necessarily reflect the views of these agencies.

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Juan J. Gutierrez, President
InterAmerica Research Associates, Inc.

Dr. L. Gayle Royer, Director
Consumer Education Resource Network

Gail Tarleton, Editor

References, *continued*

Reprints from the *Grantsmanship Center News:*

Program Planning and Proposal Writing (short and expanded versions)

How Foundations Review Proposals and Make Grants

City Hall: An Important Resource for Your Organization

Community Foundations

Researching Foundations (Parts I and II)

Foundation Fundamentals: A Guide to Grantseekers. The Foundation Center, 1980. Available from the Center's New York library, $4.95. Described by the Center as the first book a foundation grantseeker should read.

Free pamphlets from the Foundation Center:

What Will a Foundation Look for When You Submit a Grant Proposal

Basic Guide to Information on Foundations and other Nonprofit Funding

What Makes a Good Proposal

CERN Consumer Education Resource Network

1555 Wilson Boulevard
Suite 600
Rosslyn, Virginia 22209

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CERN Consumer Education Resource Network

1555 Wilson Boulevard
Suite 600
Rosslyn, Virginia 22209
(703) 522-4616

Dear Colleague:

Approximately one month ago you contacted CERN with your request for consumer education materials. We would like to know if the information and/or materials were useful. The enclosed Services Evaluation form has been designed to help us determine what you liked or did not like about our services. Please take a few minutes to complete the evaluation form and share your opinions with us, then refold the form and return it by ______________________________.

By participating in this survey, you will enable us to ascertain how well we are meeting your needs. Your opinions are essential to help us establish long term objectives and goals. All of your answers to the Services Evaluation are considered confidential; your identity will remain anonymous. The assigned code number is used only for identification of non-respondents and subsequent follow-ups.

Thank you for your assistance in this survey. CERN is here to be of service to you and we hope you will contact us again as your information needs arise.

Sincerely,

Dianna

Dianna L. Kemp
Coordinator, Information Services

DLK/tml

CERN SERVICES EVALUATION

CODE NO.:

Your responses to the following questions will help us evaluate the usefulness of the services provided through CERN, and perhaps identify possible areas for future improvements. We truly appreciate your assistance in this evaluation effort. For this first question, please check (✓) all answers that apply.

1) How did you use the information sent to you from CERN?

_______ordered some of the materials identified by CERN

_______stored the information for future use

_______used the information as a reference for students and/or colleagues

_______didn't use the information at all

_______other—please explain

To answer the remaining questions, please check (✓) the one statement that best describes your opinion:

2) Did the information you received from CERN meet the needs that prompted you to call CERN for assistance?

_______yes, completely

_______somewhat, but still need more information

_______no—please explain

3) Would you use CERN's services again?

_______yes

_______maybe—please explain

_______no—please explain

4) Reading and using the information in computer printouts can be confusing. How *helpful* was the material we included to assist you in reading and understanding the computer searches?

_____ very helpful _____ helpful _____ somewhat helpful _____ not helpful

5) CERN is designed to be a way of shortcutting the information gathering process by putting a number of data sources in one place and providing information specialists to help you identify possible resources. In your opinion, do you agree or disagree that CERN is meeting this purpose of being a helpful shortcut for information gathering?

_____ strongly agree   _____ agree   _____ disagree   _____ strongly disagree

6) Did CERN provide you enough information about the resources to allow you to choose which ones to investigate further?

_____ yes   _____ no

COMMENTS—Please comment upon what you liked most and what you liked least about the service CERN provided you. Also, please feel free to make any other comments about CERN or this questionnaire:

Thank you for your assistance.

nsumer Education Resource Network
5 Wilson Boulevard
ite 600
sslyn, Virginia 22209

TO RETURN THIS FORM: Add your return address, fold and staple so that CERN is the addressee.

____
____
____
____
Return Address

CERN

Consumer Education Resource Network

1555 Wilson Boulevard
Suite 600
Rosslyn, Virginia 22209

CERN SERVICES REQUEST FORM

FOR STAFF USE ONLY

MESSAGES:

REQUEST #: ____________________

DATE RECEIVED: ________________

SEARCH DATE: __________________

XEROX DATE: ___________________

DATABASE SEARCHED: _________________________________

SEARCH NUMBER: _____________________________________

NUMBER OF CITATIONS: _______________________________

_____NEEDS PHONE RESEARCH, RETURN _____CODE

_____REQUEST MAILED LATE, CALL _____PREVIOUS USER

WOULD LIKE: CIP CNA EC ML _____Xerox for Mailing list

DATE SENT: ____________ _____Type evaluation form

AN _ _ _ _ _ _ _ _ _ _ __ADD

PA _ _ . _ _ . _;_ _ . _ _ . _ _ __CHANGE

__DELETE

NAME: _
first last

ORG: _

ADDRESS: _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

CITY: _

STATE: _ _

ZIP: _ _ _ _ _ _

PHONE #: _ _ _/_ _ _/_ _ _ _

REFERRED BY: ______________________

What kind of information would you like CERN to provide for you? ____

____

How do you plan to use the information you are seeking? ___

____

How much information have you already obtained? Provide citations or pertinent authors if possible.

____

____

____

Intended Audience for information sought:

_____Kindergarten
_____Elementary Level
_____Junior High
_____Senior High
_____College Level
_____Adult Education

Are there any restrictions as to the data of materials? __________

What kinds of materials do you want?

_____Pamphlets
_____Curriculum Materials
_____Shelf Materials
_____Journal Articles
_____Audiovisuals
_____Information about Organizations
_____Human Resources
_____Other (Specify): ______

FOR STAFF USE ONLY:

CERN BIBLIO FILE

AN.....000195

AU.....Myhre, David C. Harrison, Betty C. and others.

IN.....Virginia Polytechnic Inst. and State Univ., Blacksburg. BBB05372.

TI.....Observing Non-Verbal Behavior and Active Listening. Two Basic Skills for Financial Counselors. Consumer Debt Counseling Project Series.

SN.....Office of Education (DHEW), Washington, D.C. RMQ66000. in cooperation with Virginia Polytechnic Inst. and State Univ., Blacksburg. College of Education and Home Economics.

PR.....$2.25. (1979).

PT.....Books.

AV.....National Foundation for Consumer Credit.
1819 H Street, N.W.
Washington, DC. 20006.

NT.....Pages: 46.

YR.....77.

BN.....Does not include brand names.

MJ.....Counseling. Adult-Education.

TP.....Institution of Higher Education.

DT.....791011

CERN ORG FILE

AN.....D00403

ON.....ORGANIZATION NAME:

National Council on Family Relations.
1219 University Avenue S.E.
Minneapolis, MN. 55414.
(612) 331-2774.

PT.....PROJECT TITLE: Family Resource/Referral Center.

PC.....Margaret J. Bodley, Project Director.

TP.....TYPE OF PROGRAM: 00T03

FS.....FUNDING SOURCE: Foundation Grants.

GA.....GEOGRAPHICAL AREA: National.

AC.....ACRONYM: FR/RC.

YR.....YEAR ESTABLISHED: 1979.

MS.....MEMBERSHIP SIZE: NCFR - 5,000.

SS.....STAFF SIZE: 2 paid. 5 volunteer.

PO.....PURPOSE OF ORGANIZATION: To develop a national bibliographic and information database to meet the great demand for family information on all levels.

MA.....MAJOR ACTIVITIES AND SERVICES: Produce/distribute print materials. Provide educational programs (workshops, seminars, conferences). Operate a reference and referral service. Maintain a resource library. Conduct fundraising/grantsmanship.

MJ.....MAJOR DESCRIPTORS: Family.

GL.....GRADE LEVELS: General Public.

DT.....800820

CASE 8

MASSACHUSETTS EXECUTIVE OFFICE* OF CONSUMER AFFAIRS

The Executive Office of Consumer Affairs, which is one of the Governor's cabinet offices, supervises nine regulatory agencies and twenty-eight licensing boards (see Figure 1 for the organizational chart and appendix to this report for a description of each division). The Executive Office provides "administrative oversight for the agency's budget and personnel actions." It also "actively promotes consumer education and informs businesses of their responsibilities to consumers." (1) Further,

> Consumer Affairs represents the interests of consumers when it testifies before State and Federal agencies. It actively works with other State agencies in the protection of consumers. Seminars are presented to consumer groups, educators, civic and trade associations, and merchants. Consumer Affairs has actively promoted the interests of women, minorities and the handicapped. The office introduces legislation to make its agencies more effective and to correct abuses or oversights which the Self-Help Information activities have disclosed. (2)

The Executive Office produces consumer rights brochures for the general public, covering such topics as woodstoves, buying wood, and space heaters; and automobile repair (the appendix to this report includes examples of these pamphlets). A Self-Help Information Line, staffed by interns (the elderly and college students), advises consumers of their rights so that they can resolve their own problems, and provides referral when it is deemed necessary. The informational brochures might even be sent to consumers registering a complaint with the Self-Help service. The Self-Help service responds to telephone, written, and walk-in requests. The majority of requests, however, are by telephone. In fact, over 32,000 consumer referral and complaint calls are received each year. Automobile sales and services, followed by landlord/tenant rights, are the two major topics for consumer complaints.

In addition to distributing consumer rights information brochures and maintaining the Self-Help service, the Executive Office refers consumers, when necessary, to the appropriate agency. For example, each division of the Executive Office has a

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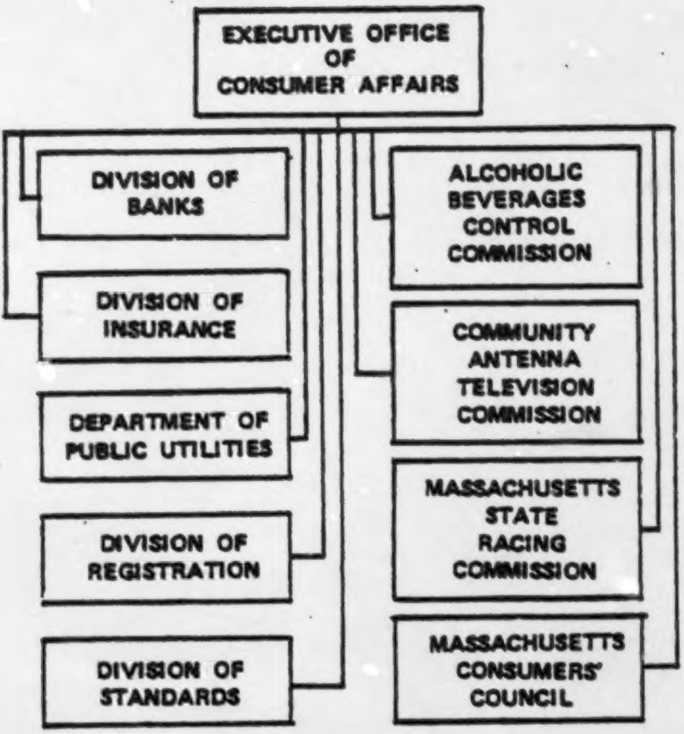
[*] The interview was conducted with Barbara Neuman, Massachusetts Executive Office of Consumer Affairs, 1 Ashburton Place, Room 1411, Boston 02108.

[1] A Guide to the Executive Office of Consumer Affairs, an informational pamphlet of the Office.

[2] Ibid.

Figure 1. The Executive Office of Consumer Affairs
(Eileen Schell, Secretary of Consumer Affairs)


EXECUTIVE OFFICE OF CONSUMER AFFAIRS
DIVISION OF BANKS
DIVISION OF INSURANCE
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF REGISTRATION
DIVISION OF STANDARDS
ALCOHOLIC BEVERAGES CONTROL COMMISSION
COMMUNITY ANTENNA TELEVISION COMMISSION
MASSACHUSETTS STATE RACING COMMISSION
MASSACHUSETTS CONSUMERS' COUNCIL

section to handle consumer complaints, or a referral might be made to the attorney general's office. Staff members "carry the consumer through the entire process until the complaint is resolved." In this connection, it might be noted that the Office maintains a card file specifying the customer relations division within specific organizations. The Office might also place people in contact with local consumer groups, which would assist in mediation. These groups also acquire and distribute the Office's brochures.

The Executive Office maintains an extensive consumer information file so that staff members can refer consumers to the appropriate information, be it in Consumer Reports or elsewhere. Material from the file cannot circulate; however, with the appropriate citations in hand, consumers can check their local libraries. The Office also collects assorted sources such as the information sheets and brochures that the Better Business Bureau produces on individual companies. For preparation of the consumer rights brochures, staff members draw upon government publications and state statutes.

The Office has a "small budget" and a "small number of staff." Proposition 2-1/2 will probably not impact these operations. It, however, has affected the budget for the printing of consumer rights pamphlets. Because of this, the Office is seeking ways to minimize printing costs. Staff members might write the pamphlets, prepare the necessary graphics, and even handle the typesetting. They are also permitting local consumer groups and other organizations, which have their own printing presses, to print the pamphlets under the supervision of the Executive Office. In order to protect the interests of the consumers, the pamphlets have been copyrighted. This way the Executive Office can maintain control over the type of information the local groups are disseminating.

In summary, the Executive Office is engaged in information dissemination and referral, document delivery (distribution of the consumer rights brochures), consumer education, lobbying and advocacy for the legislation that it helps to draft, and problem-solving. The approach to problem-solving is one of self-help, where staff members try to get the consumer to do the preliminary work and to attempt to resolve the problem with the merchant. If necessary, consumers will be referred to a local consumer group for mediation or to a government agency. By doing the preliminary work, consumers assist the already overworked consumer groups.

Information acquisition and organization is not a function of the Executive Office. The Office does not engage in information interpretation and advice, in the sense that staff members do not offer legal advice. They might tell people what the statutes say, but they will not interpret the law. They might also refer consumers to the informational brochures which present the law in easily understood terms.

GOALS

The Executive Office defines consumer information in terms of consumer rights, because this is where the bulk of questions and complaints come from. There are no written goals, objectives, or an annual report. Written information is produced in relation to the pamphlets, the need for legislation, and the requirements of the Governor's office.

It is felt that local organizations and groups are definitely aware of the Executive Office and its programs and services (rated a one). The Office distributes information to them and has developed a cooperative relationship. Consumers may not be aware of the Office; however, their contacts with local consumer groups may lead to interaction with the Office. Further, consumers might receive the consumers rights brochures, which specifically mention the Office. Finally, the mass media might promote the Office and telephone directory assistance might refer people with consumer rights complaints. As is evident, the Office believes that it is meeting consumers needs; "we do a good job considering our limited budget and number of staff."

PUBLICITY

Consumer education is accomplished through the distribution of the consumer rights pamphlets, seminars, media (radio, television, and newspaper) coverage, contacts with community groups and various organizations, press releases and talks before the community. Personnel for the television program, for example, might contact the Executive Office for information in relation to a story they plan to feature. The impression is that all of these methods constitute effective advertising.

There is a great demand for the pamphlets; however, demand exceeds the budget allotted for printing. By seeking alternative ways for printing and distributing the brochures, the Executive Office can respond effectively to the increased demand. When consumers call the Self-Help service, they might need access to the type of information contained in the brochures. Consequently, knowledge of this fact plus access to the brochures locally would be beneficial.

USERS

The Executive Office has not undertaken a formal evaluation of its services and end users; it lacks both the financial and human resources to do such a study. However, it monitors the complaints received through the Self-Help service. Patterns in complaints might lead to the drafting of appropriate legislation. Further, a record of all persons visiting the Executive Office is maintained. This record identifies the person's name, address and purpose of the visit.

Many users of the Self-Help service appear to be doing so for the first time. "When they contact us, they discover that there is not alot of red tape." Consumers, therefore, might be more willing to make follow-up calls and to inform staff about the status of a complaint.

Without formal evaluations, a determination of effectiveness of the services provided must depend on less scientific means. For example, recording the number of people calling, the number requesting follow-up assistance, and the number of repeat users. People might also volunteer to write letters of appreciation. By working with regulatory agencies, the staff of the Executive Office can form impressions about the willingness of people to follow through on referrals.

THE FIVE CRITERIA

The five factors were considered in relationship to the preparation and distribution of the information brochures and the Self-Help service. For both of these, the factors were all considered of equal importance. The information must be accurate, up-to-date, and understandable. Frequently, the printed sources summarize the appropriate sections of a statute and provide a reference to that statute. Consumers refer to the summarized statutes when they are discussing their complaints with business in question. Further, staff members try to save consumers time and money. As already noted, they try to assist consumers in "cutting through the red tape."

LIBRARIES

With its small printing budget, the Executive Office is experiencing problems in disseminating its materials to the public. Libraries could help in this regard. They might offer to print the brochures under the direction of the Office staff, house the brochures in their information files, and distribute copies to their clientele. Librarians might also refer clients to the Self-Help service and receive training from local consumer groups to assist consumers in the mediation process.

The primary role for libraries was seen as information acquisition, organization, dissemination, and referral; document delivery and consumer education. All of these factors rated most important (one on a five-point scale). All the other factors (lobbying, advocacy, information interpretation/advice, and problem-solving) were perceived as least important (a five). Libraries could be a major partner in assisting the Executive Office, local groups and organizations, and the consumer, if they so desired. By working together, "we can all get the necessary information to the public. Instead of waiting for the necessary brochures to be received in the mail, consumers could go to the library and pick them up."

APPENDICES

A GUIDE TO THE EXECUTIVE OFFICE OF CONSUMER AFFAIRS

CONSUMER'S GUIDE TO WOOD STOVES, BUYING WOOD, AND SPACE HEATERS

CONSUMER'S GUIDE TO AUTO REPAIR

ALCOHOLIC BEVERAGES CONTROL COMMISSION

Chairman: John P. Larkin
100 Cambridge St., Room 2204
Boston, MA 02202
Telephone: 617/727-3040

The Alcoholic Beverages Control Commission regulates all aspects of the liquor industry. It supervises quality and manufacture, transportation and storage, import and export, advertising and sale, and public consumption of alcoholic beverages. The ABCC may grant, suspend or revoke liquor licenses and permits of manufacturers, wholesalers, warehouses, shippers, taverns and bars, restaurants and hotels, package stores, chartered clubs and pharmacies. To ensure compliance with the law, the ABCC may conduct investigations or hearings involving various segments of the liquor industry.

COMMUNITY ANTENNA TELEVISION COMMISSION

Chairman: Jeffrey R. Forbes
100 Cambridge St., Room 1105
Boston, MA 02202
Telephone: 617/727-6925

The Community Antenna Television Commission regulates the cable television industry by setting rates and determining standards. It creates a uniform regulatory framework within which rates, performance, technical quality and community service can be measured objectively. The Commission can suspend or revoke a license granted by a municipality if there were improprieties in granting the license, or if the licensee fails to conduct business properly. Since 1979, improvements in technology and increased public awareness of the cable industry have created a dramatic increase in the level of activity of this Commission.

DIVISION OF STANDARDS

Director: Donald B. Falvey
One Ashburton Place, Room 1115
Boston, MA 02108
Telephone: 617/727-3480

The Division of Standards is responsible for setting standards and testing all types of weighing and measuring devices used in the sale of food, fuels, and other products. It determines standards for the accuracy and safety of all thermometers. The Division of Standards governs the advertising and sale of motor fuels, sets standards for lubricating oils, anti-freeze and fuel oils, including the inspection of all fuel-dispensing pumps. It licenses hawkers and peddlers, and motor fuel and motor oil dealers. The Division enforces the Unit Pricing Regulations established by the Massachusetts Consumers' Council.

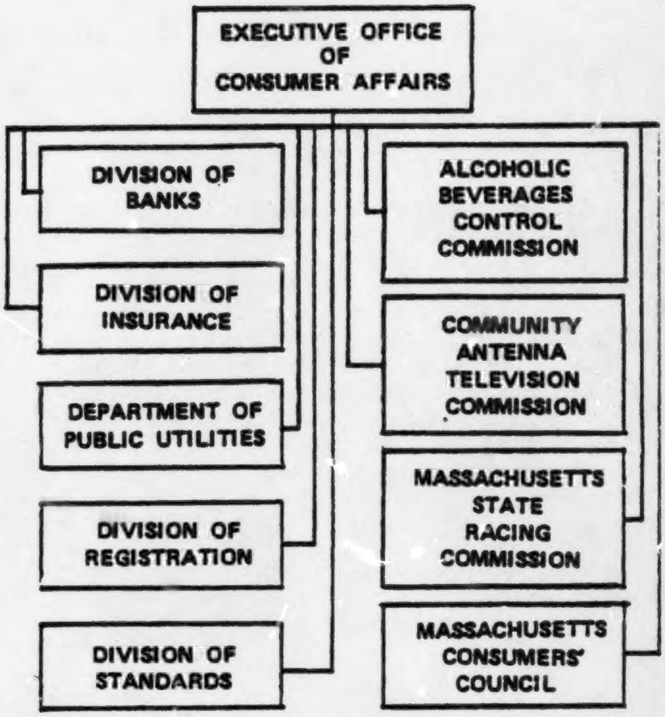
MASSACHUSETTS CONSUMERS' COUNCIL

Chairperson: Dr. Mildred Berman
100 Cambridge St., Room 2109
Boston, MA 02202
Telephone: 617/727-2605

The Massachusetts Consumers' Council was created in 1963 to act "for and in behalf of the people of the Commonwealth" before boards, commissions, departments or agencies in any hearing or matters affecting public interest. The Council is both a proposer of action and a watchdog, or ombudsman, of agencies which represent the consumer. The Council has the authority by law to intervene on behalf of the public in rate setting proceedings, particularly where there is no other state agency to take responsibility. The Legislature may call upon the Council to address specific consumer problems as they arise.

A Guide to

THE EXECUTIVE OFFICE OF CONSUMER AFFAIRS


EXECUTIVE OFFICE OF CONSUMER AFFAIRS
DIVISION OF BANKS
DIVISION OF INSURANCE
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF REGISTRATION
DIVISION OF STANDARDS
ALCOHOLIC BEVERAGES CONTROL COMMISSION
COMMUNITY ANTENNA TELEVISION COMMISSION
MASSACHUSETTS STATE RACING COMMISSION
MASSACHUSETTS CONSUMERS' COUNCIL

EDWARD J. KING
GOVERNOR

EILEEN SCHELL
SECRETARY OF CONSUMER AFFAIRS

Consumer self help Affairs

executive office of consumer affairs
one ashburton place
boston, massachusetts 02108
617 / 727 — 7780

Make it in Massachusetts

EXECUTIVE OFFICE OF CONSUMER AFFAIRS

Cabinet Secretary: Dr. Eileen Schell
One Ashburton Place, Room 1411
Boston, MA 02108
Self-Help Line: 617/727-7780
Administration: 617/727-7755

The Executive Office of Consumer Affairs, which supervises nine regulatory agencies and twenty-eight licensing boards, is one of the Governor's Cabinet Offices. By statute, the primary responsibility of the office is to act as administrative oversight for the agency's budget and personnel actions. Consumer Affairs actively promotes consumer education and informs businesses of their responsibilities to consumers. Issues are researched and consumer rights pamphlets are published to explain major topics of concern. The Self-Help Information Line advises consumers of their rights and remedies so that they are able to resolve problems on their own. Self-Help responds to individual telephone, written and walk-in requests for guidance in taking corrective action. Over 32,000 consumer referral and complaint calls are handled each year.

Consumer Affairs represents the interests of consumers when it testifies before state and federal agencies. It actively works with other state agencies in the protection of consumers. Seminars are presented to consumer groups, educators, civic and trade associations, and merchants. Consumer Affairs has actively promoted the interests of women, minorities and the handicapped. The office introduces legislation to make its agencies more effective and to correct abuses or oversights which the Self-Help Information activities have disclosed. Readers of *Boston Magazine* have voted the office the "Best Local Government Agency."

DIVISION OF BANKS

Commissioner: Gerald F. Mulligan
100 Cambridge St., Room 2004
Boston, MA 02202
Consumer Line: 617/727-2102
Administration: 617/727-3145

The Division of Banks regulates, supervises, and audits state-chartered trust companies, savings banks, cooperative banks, credit unions, finance companies and collection agencies. The Division of Banks also grants charters and approves branches, acquisitions, and mergers of its financial institutions. It promotes public interest, both by encouraging banking competition and community reinvestment and by supervising small loan interest rates and credit transaction compliance.

DIVISION OF INSURANCE

Commissioner: Michael J. Sabbagh
100 Cambridge St., Room 1801
Boston, MA 02202
Consumer Line: 617/727-3341/3333
Administration: 617/727-5184
Springfield Office: 413/736-8349

The Division of Insurance regulates all aspects of the insurance business including rate setting, licensure of agents and brokers, and examination of domestic and foreign insurance companies. Drivers may appeal accident surcharges before the Merit Rating Board. Consumer information is available through pamphlets, the complaint handling division, and by appointment through the division library. A program of insurance premium cost disclosure and easy-to-read policies have assisted the consumer to make a more informed purchase of insurance.

DEPARTMENT OF PUBLIC UTILITIES

Chairman: Doris Poté
100 Cambridge St., Room 1200
Boston, MA 02202
Consumer Line: 617/727-3531
Toll-free line: 1-800-392-6066
Administration: 617/727-3500

The Department of Public Utilities is responsible for the regulation and rate setting for electric, gas, water, telephone and telegraph utilities. The DPU also licenses and regulates commercial motor vehicles, railway and bus companies, towing and instate moving companies. The Consumer Division handles complaints including billing and termination practices of utility companies. The DPU also responds to requests associated with its other regulated businesses.

DIVISION OF REGISTRATION

Director: John N. Mattuchio
100 Cambridge St., Room 1520
Boston, MA 02202
Telephone: 617/727-3076

The Division of Registration consists of a central administrative office and 28 individual boards of registration. Each board examines and licenses applicants, holds disciplinary hearings, and establishes standards for professional conduct. The following professions and trades are regulated:

DIRECTOR OF THE DIVISION	727-3076		
Aestheticians	727-3090		
Accountants	727-3078	Architects	727-3065
Barbers	727-3082	Chiropractors	727-3093
Dentists	727-3067	Dental Hygienists	727-3
Doctors	727-3086		
Drinking Water Operators	727-8107		
Embalmers & Funeral Directors	727-3072		
Electricians	727-3050	Electrologists	727-3
Engineers	727-3088	Hairdressers	727-3
Health Officers	727-8108	Landscape Architects	727-3
Land Surveyors	727-3088	Nurses	727-3060
Nursing Home Administrators	727-3073		
Opticians	727-3071	Optometrists	727-3
Pharmacists	727-3084	Physical Therapists	727-3
Plumbers & Gasfitters	727-3046	Podiatrists	727-3069
Psychologists	727-8108	Radio & TV Technicians	727-3080
Real Estate Brokers & Salesmen	727-3055		
Sanitarians	727-3069	Social Workers	727-5
Veterinarians	727-3071		
Waste Water Treatment Operators	727-3072		

MASSACHUSETTS STATE RACING COMMISSION

Chairman: Dr. Paul Walsh
One Ashburton Place, Room 1313
Boston, MA 02108
Telephone: 617/727-2581

The Massachusetts State Racing Commission has jurisdiction to regulate pari-mutuel activities for thoroughbred, harness, and greyhound racing. The Commission is responsible for the enforcement of rules and regulations governing the security and protection of racing animals and the wagering public. As a licensing authority, it is empowered to investigate complaints about business conducted at racetracks or racing fairs, especially when it involves the calculation of odds, payment of winnings, or integrity of a race. The commission also operates a testing laboratory and audits the books of racetracks.

FIREWOOD RESOURCES

Call the regional field office of the Massachusetts Department of Environmental Resources for advice on how and what to cut for firewood. You may be able to get a permit to cut firewood on State land from this agency, too. The cordwood program usually runs from September 1 through November 30. Free timber permits can be obtained from one of the Regional Federal Forestry Offices in Maine, New Hampshire and Vermont. Each state has its own regulations, so obtain all rules before traveling north for wood.

Comparative shopping is essental for those who plan to purchase firewood. Prices and species vary greatly among the dealers.

ILLEGAL SPACE HEATERS

Portable kerosene space heaters are illegal in buildings used wholly or partly for residences. Other portable wick-type and other space heaters having a barometric fed fuel control which store fuel less than 42" from the center of the burner are also illegal for use in buildings used wholly or partly for residences. These heaters are adapted for burning range oil, No. 1 fuel oil or kerosene. It is illegal to offer for sale, sell or install a secondhand space heater or a secondhand portable stove which uses kerosene, range oil or No. 1 fuel oil. It is illegal to install or use an unvented space heater which uses gas or oil fuel in a building used wholly or partly for a residence. Punishment for violation of any of the above is a fine of not more than $100. *M.G.L. c. 148, § 5A, § 25A, and § 25B.* If you have any questions regarding space heaters of this type, call the State Fire Marshal's Office at 617/566-4500, ext. 221 or your local Fire Chief for assistance. Don't be misled if you see these offered for sale. They may be sold to industrial or construction users.

LEGAL SPACE HEATERS

Electric space heaters including Quartz heaters are legal in Massachusetts. Some precautions should be taken when using these appliances:

- Carefully read all labels and instructions before using a new heater.
- Be sure that an electric space heater has an automatic switch which will cut off electric power if the heater is tipped over.
- Do not use an extension cord for an electric heater unless it is a heavy duty cord which is rated as high as the current rating listed on your heater.
- Never touch an electric heater when you are wet. You may receive an electric shock. Avoid use of a portable electric heater anywhere in a bathroom.
- Examine all old heating devices. Make sure they are equipped with modern safety features and the wiring is in good condition.
- Repair or replace loose or missing guards on heaters.
- Do not place space heaters near drapes, furniture or other flammable materials.
- Keep children and pets away from space heaters. They can be burned even after the device has been turned off due to heat retention.

ABBREVIATIONS

M.G.L. = Massachusetts General Laws;
c., § = Chapter and Section;

Consumer self help Affairs

EXECUTIVE OFFICE OF CONSUMER AFFAIRS
ONE ASHBURTON PLACE
BOSTON, MASSACHUSETTS 02108
Telephone 617/727—7780

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Consumer's Guide to Wood Stoves, Buying Wood, and Space Heaters

EDWARD J. KING
GOVERNOR

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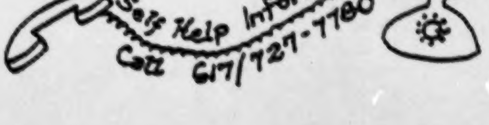

The soaring cost of conventional heating fuels has prompted many consumers to consider supplementary heating devices and inexpensive ways to save energy. Every effort should be taken to use these aids, but safety should not be sacrificed in an effort to reduce heating bills.

In a period of a year, the U.S. Consumer Product Safety Commission reported that 1,465 persons received emergency hospital treatment for injuries from coal or wood burning stoves, and nearly 5,800 persons received emergency hospital treatment for burns, carbon monoxide poisoning, and other injuries from space heaters.

WOOD STOVES

Buying Wood

Before purchasing a wood stove, make sure you can purchase sufficient wood at a reasonable price that will justify your investment.

- Use seasoned or dry wood. It burns better and has more useful heat value. Careful selection of wood will help prevent creosote build-up.
- Do not use quality lumber (cabinet woods or ornamental shade trees) for fuel — they are of greater value as a continuing part of our environment! Do not cut down trees growing on steep slopes. Their root systems help to prevent erosion.

Stove Installation

- Follow installation instructions closely. Provide sufficient distance between the stove and the wall. (Wood stoves should be placed at least 36" from the walls).
- Never use fuels other than wood. Never throw gasoline or charcoal fluid in a stove, or burn coal in a wood stove.
- Before installing a wood stove, you must obtain a permit from your local building inspector. After installation, the inspector must check to determine that it has been done properly.
- An improperly vented chimney can produce deadly quantities of carbon monoxide.
- Keep chimneys clear of creosote, soot and bird nests. They may cause chimney fires.

Safety Considerations

Excessive overheating is the most common flaw of stoves. Some metal stoves buckle under their own heating capacity, or they may scorch walls four feet away. Other common stove failures are smoking and faulty electric air blowers.

An estimated 75% of wood stove related fires are caused by unsafe installation. The Massachusetts State Fire Marshal's evidence shows that approximately 98% of wood stove fires are caused by faulty installation and improper operation.

Underwriters' Laboratories in Chicago has developed two standards for safety requirements in wood and coal stoves. Open-air stoves are covered by UL737; airtight stoves are covered by UL1482.

Effective January 1, 1980, all wood stoves sold in the Commonwealth must have been tested by a certified testing laboratory and bear safety certification labels. The label must have the following information:

Name(s) of the manufacturer
Identification of the testing laboratory
Test standards (either UL737 or UL1482)
Test date
Serial number of the unit
Model number
Approved fuel
Minimum clearance from combustion surfaces

BUYING WOOD

Cordwood and firewood can be advertised, offere[illegible] f sale, and sold legally only as closely stacked volumes cubic feet or cubic meters. Cordwood is four feet in lengt Firewood is cut to any lengths more than eight inche[illegible]n less than four feet. Terms such as cord, face cord, [illegible]il truckload or similar terms cannot be used in the advertisin and sale of cordwood or firewood. Kindling wood inc[illegible]de all split wood, edgings, clippings or other wood waste [illegible]er aging eight inches in length. The standard unit of measur for kindling wood is the bushel, 2,150 and 42/100 cubi inches. *M.G.L., c. 94, § 298.*

The seller of cordwood or firewood must issue a deli[illegible]r ticket or sales invoice to the buyer upon delivery. Thi receipt must include the name and address of the s[illegible]lle and the purchaser, the volume of wood (expressed in [illegible]bi feet or cubic meters), the delivery date and the p[illegible]ce *M.G.L., c. 94, § 299.*

Contact your local Sealer of Weights and Measur[illegible] the State Division of Standards in Boston at 617/727-[illegible]8 for further information.

- For longer lasting fire, add the heavier hardwood such as ash, beech, maple and oak to your softw[illegible]d The hardwoods burn less vigorously and with a sh[illegible]rt flame than softwoods. Oak gives the most unifor shortest flames, and it produces steady, glowing coal
- The heat a log produces varies with the concentr[illegible]ic of woody material, resin, water and ash. Since w[illegible] are of different compositions, they ignite at differen temperatures and have different heat values. T achieve the ideal fire, it is advisable to mix ligh[illegible]r heavy woods.

	TYPE OF WOOD	Relative Heat	Ease of Ignition	Ease of Splitting	Relative Smoke	Tendency to Spark	OVERALL RATI[illegible]
Hardwood	Apple, Ash, Beech, Birch, Locust, Hard Maple	Hi	Lo	Med	Lo	Hi	Excell[illegible]
	Cherry, Soft Maple, Walnut	Med	Med	Hi	Lo	Lo	Goo[illegible]
	Elm	Med	Med	Lo	Med	Lo	Fair
	Poplar	Lo	Hi	Hi	Med	Lo	Fai[illegible]
Softwood	Cedar	Lo	Hi	Hi	Med	Hi	Fai[illegible]
	Pine and Fir	Lo	Hi	Hi	Med	Lo	Fair
	Spruce	Lo	Hi	Hi	Med	Hi	Fai[illegible]

- Buying the densest species available may save money For example, a cordwood of hickory contains mor potential heat value than a cordwood of white [illegible]n because it is a denser wood. With the same pric[illegible]e cubic volume of cordwood, hickory is a better buy.
- Check the quality of wood under consideration for purchase. Factors such as whether the wood is soun[illegible]o rotten, straight or crooked, dry or green affect both[illegible] volume of wood you receive and the heat value.
- Do not burn fir trees (including your leftover Christ[illegible]as tree) in your fireplace. They emit sparks which [illegible]a ignite your roof, your chimney or your rug.
- To prevent or minimize rot, store cordwood and firewood in a sheltered place. Keep wood in your b[illegible]e ment or garage away from flammable materials. C[illegible]ci occasionally for bugs, and spray if it is necessary.
- Install a smoke detector. A stove can be dangerous even if you take the proper precautions — sparks [illegible]r fly, and logs can roll. Installing a smoke detector [illegible]il help to alert your family about fires. Obtain produc information from the U.S. Consumer Product Safety Commission, 100 Summer Street, Boston 02110

REMEDIES FOR DISSATISFACTION

- If dissatisfied, immediately register a complaint with the owner or manager of the shop which did your work.
- If you cannot reach a settlement, you may wish to seek a second opinion from another auto mechanic or a vocational school instructor. Include this information in a complaint letter to the shop owner.
- If the repair shop fails to respond, write to your local consumer group listed in the Self-Help section in the front of your telephone book. State the facts including:
  — your name, address and daytime telephone number
  — name and address of the repair shop
  — make and model of your car
  — the total cost of repairs shown on a copy of your bill
  — a copy of the complaint letter you have sent to the shop.
- A violation of the auto repair regulations described in our pamphlet "Consumer's Auto Repair Rights," is a violation of the Consumer Protection Act. Consequently, if the above mentioned action fails, you should write a *"30-Day Demand Letter"* seeking recovery of your loss. Send the letter certified mail/return-receipt requested to the shop, a copy by regular mail to the Department of the Attorney General and retain a copy for your records.

SMALL CLAIMS COURT

If either your local consumer group or a 30-Day Demand Letter fails to provide a remedy, you may have to sue in Small Claims Court. Small Claims Court is a people's court where you can recover up to $750 for a filing fee of less than $9. The atmosphere is informal, and the rules of the court are simple. A consumer represents himself in Small Claims Court and does not need an attorney. To help prepare your case, you may wish to obtain advice from *MASSPIRG Small Claims Court Advisory Service* in Boston. Telephone 617 / 423 — 1796. You may also wish to obtain these publications:

- *"How to Sue in Massachusetts Small Claims Court"*

  and
- *"A Consumer's Guide to Writing a Chapter 93A 30-Day Demand Letter"*

  Executive Office of Consumer Affairs
  One Ashburton Place, Room 1411
  Boston, Massachusetts 02108
  Telephone: 617 / 727 — 7780

- *"How to Sue in Small Claims Court Using the Consumer Protection Act"*

  Mayor's Office of Consumer Affairs and Licensing
  City Hall, Room 703
  Boston, Massachusetts 02201
  Telephone 617 / 725 — 3320

ABBREVIATIONS
M.G.L. = Massachusetts General Laws;
c., § = Chapter and Section;
CMR = Code of Massachusetts Regulations.

For further information you may wish to obtain **Consumer's Auto Repair Rights** *which is also available from our Office.*

Consumer self help Affairs

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Consumer's Guide to Auto Repair

AUTO
REPAIR

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SELECTING AN AUTO REPAIR SHOP

Based upon the recommendations of friends, compile a list of potential repair shops. Narrow your choice to two or three facilities based upon the strength and frequency of these recommendations. Then, contact the Better Business Bureau and your local consumer group to determine the nature and extent of any complaints which have been filed against these shops. Ask the shops you are considering to furnish you with customer references.

QUALIFICATIONS

Find out whether any of the mechanics in a shop are certified by the National Institute for Automotive Service Excellence (NIASE). Although certification is a sign of competence, many excellent mechanics may not be certified. A certified mechanic has taken one or more written examinations in these eight automobile specialty areas:

- Engine Repair
- Engine Tune-up
- Front End
- Brakes
- Automatic Transmission
- Manual Transmission and Rear Axle
- Electrical Systems
- Heating and Air Conditioning

If an automobile mechanic takes and passes all tests, he is certified as a General Automobile Mechanic. If he passes one or more tests, but not all tests, he is certified in the specific areas in which he has proven his competency. (Additional tests and certifications are given for heavy-duty truck mechanics, for body repair, and for painting and refinishing specialists.)

Consumers wishing to obtain a list of places in their community where certified mechanics are employed can send a self-addressed stamped envelope to:

NIASE, Suite 515
1825 K Street, N.W.
Washington, D.C. 20006

ON-SITE INSPECTION

Visit the repair facility. The shop should appear to be well-equipped with proper tools and well-stocked with parts. The work area should be clean and well-organized. Cleanliness and order usually are associated with good mechanics.

DIAGNOSING YOUR PROBLEM

Automotive diagnostic centers are located in many urban areas. These centers provide a comprehensive examination of your car for a fixed fee. They use sophisticated test equipment to identify potential mechanical problems, and they examine the efficiency of your car's operation. Mechanics at a diagnostic center list all required repairs and adjustments, but they do not fix your car. Diagnostic center evaluations are generally impartial, thorough, and accurate. They are a good investment for individuals who are not familiar with cars.

EXPLAINING YOUR PROBLEM

Provide the mechanic with as many details as possible about your car's problem. Describe the symptom, and let the mechanic make the diagnosis. If possible, include a description of these factors:

- nature of the problem
- when the problem first occurred
- circumstances under which the problem exists
- unusual sounds, leaks or odors

AUTO SERVICE CONTRACTS

A service contract is "breakdown insurance." It provid specific coverage during a period when the service contractor agrees to repair or maintain your car for an agreed upon price. An auto service contract is *not* required eith to obtain insurance or to finance your car.

Before deciding to purchase an automobile service contract, review your existing coverage. It may overlap cove age which you already have under a manufacturer's dealer's express warranty, or under the Massachusett implied warranties which automatically exist with every dealer sale. If a car is purchased for personal use, a deal may not use a disclaimer stating the car is being sold *as i with all faults*, or with a *50-50* warranty.

Decide whether the service contract cost is worth the service you will receive. A service contract should speci the following:

- Coverage (cost and term in years or miles)
- Deductible amounts (if any)
- Scope of basic coverage (all parts or only major me chanical parts, and labor)
- Optional coverage (air-conditioner and electrical systems)
- Agency authorized to perform repairs (geographic restrictions of service or restricting the provision of service to a single dealership
- Limitations or exclusions (maintenance, unrelate repair, towing, car rental)
- Transferability (provision for a successor if the issuer goes out-of-business)
- Transferability to another vehicle
- Transferability to a private party successor owner
- Fees (service transfer or cancellation)
- Service charges, if any, for visits must be in writin
- Method of payment (either direct dealer or mechan payment or reimbursement for authorized bills yo have already paid)

Auto service contracts are offered by manufacturer contract companies, insurance companies and individu dealers. A variety of coverage and pricing is available. Some contract sellers are insured against a sudden rush of claims and can demonstrate their ability to meet financi obligations, others cannot. Ask the company to provid evidence of financial strength before you purchase.

PRICES FOR REPAIRS

Unless a price list is posted clearly and conspicuously, the estimate must list the specific repairs and the tot price including an itemization of parts and labor. Prices f the same work can vary widely, so it is advisable to obta comparative prices from several shops. Before work begins, you must give the shop written authorization either b signing an estimate or by signing a waiver which includ authorization to a specific amount. *M.G.L., c. 93A, § 2(c), 940 CMR 5.05 (3).*

CASE 9

MIDDLESEX COUNTY EXTENSION SERVICE*

In 1914, with the passage of the Smith-Lever Act, Congress established the Cooperative Extension Service, a nationwide program joining the U.S. Department of Agriculture with the land grant university in each state. The state of Massachusetts agreed to the provisions of the Act in the same year, when it established the Cooperative Extension Service and charged the University of Massachusetts in Amherst with administrative responsibilities. Two years later, Middlesex County established its Extension Service.

Comprising a department of county government, the Service is an educational and research body serving all the cities and towns in Middlesex County. The purpose of the Service is "to provide a wide variety of educational information to people;" "to assist them in obtaining a better and more satisfying family life;" and to enable them to better help themselves. To be more specific, the basic philosophy is that people can improve their lives if information resulting from research is made available through publications, local media, workshops, programs, or individual consultations.

The County Extension Service provides its services in cooperation with the Cooperative Extension Service of the University of Massachusetts and the U.S. Department of Agriculture. (1) It can also draw upon the resources of the following:

> Board of Trustees, County Commissioners, ... Middlesex County Foundation, Inc., Middlesex County 4-H Fair Directors, Middlesex County Extension Homemakers' Council, County 4-H Youth/ Adult Development Corp., Middlesex County 4-H Program, Review and Support Committee, Middlesex County 4-H Resource Development Committee, Middlesex County Advisory Board, 4-H members and the many 4-H Volunteer Leaders. (2)

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[*] The interview was conducted with Debbi Doncov, Home Economist; James T. Williams, Agricultural Specialist; and Debbi Jones, 4-H Coordinator of the Middlesex County Extension Service, 105 Everett St., Concord, Massachusetts 01742.

[1] For background information on the Cooperative Extension Service see : H.C. Sanders, The Cooperative Extension Service (Englewood Cliffs, N.J.: Prentice-Hall, 1976), and A History of Sixty Years of Cooperative Extension Service in Massachusetts (University of Massachusetts, Cooperative Extension Service, n.d.).

[2] Annual Report from the Staff of the Middlesex County Extension Service, July 1, 1980-June 30, 1981. p. 2.

GOALS

When asked to rank the Extension Services' goals on a scale of one to five, the three respondents believed that they were aware of organizational goals but not able to meet them all effectively (rated a three). County residents' awareness of the goals was also rated a three. It is difficult to enhance awareness without additional staff and financial support. County extension programs can be more effective in those states with smaller counties and a larger number of staff per population. The counties in Massachusetts are all large. Given these factors, respondents also believed that the achievement of goals and the development of plans to meet the goals also rated a three. The question, as one of them noted, was "how far should we go with our services? We cannot be experts on everything and cannot offer all services to the same depth."

PROGRAMS

The Service consists of four distinct programs: the **Extension Home Economics Program, the Expanded Food and Nutrition Program, the 4-H/Youth Development Clubs (to be discussed further at the end of this section), and the Agriculture and Community** Resource Development. The Home Economics Program, which is an informal adult education program, seeks to develop the potential that exists for better individual, family, and community living by:

- improving the quality of individual and family decisions
- providing the competencies needed to carry out those decisions
- helping individuals increase their ability to interact effectively with others

A staff of four trained in home economics conducts and coordinates programs dealing with such topics as consumer issues, nutrition, financial and home management, health, and clothing and textiles. Community residents, for example, are aquainted with simple home repairs, consumer rights, selecting and financing a home, and the establishment of credit for women. The announcement of programs and news stories are provided through:

- workshops, meeting, discussion groups
- mass media (newspapers, radio, TV)
- bulletins, newsletters
- extension program aides in food and nutrition employed to assist low-income families
- homemaker study groups
- short courses, series, home study programs
- volunteers trained by Extension to teach others
- cooperative efforts with other agencies and organizations
- speakers bureau (extension home economists provide educational talks)
- films, slide-tape presentations
- news release

The extent to which publicity is successful depends upon the topic and the timing. It must be responsive to the demand for information and the willingness of the target group to seek it.

Commercial fruit growers, for example, receive a written newsletter providing up-to-date information and can call a hotline on pest control. They can also have an extension agent visit their farms or the growers can telephone the appropriate agent. If the agent observes a common problem, he might organize a meeting to maximize the dissemination of information.

Expanded Food and Nutrition programs, which operate in Cambridge, Somerville, Everett, and Lowell, provide nutrition information and skills to families with limited incomes and youth. The programs are administered at the county level, but the staff and operating funds are provided by the University. These programs provide one example of the cooperative relationship found in the Extension Service.

The 4-H Clubs enable youth between the ages of 8 and 19 to learn by doing. These young people select project areas (e.g., beekeeping, dairy goats, food and nutrition, gardening, public speaking and veterinary science) and progress through self-paced learning activities. Agricultural specialists assist dairymen, livestock producers, fruit growers, poultry men, market gardeners, and flower growers in Middlesex, Essex, and Worcester counties.

The Community Resource Development program, which is concerned with the proper use and management of local resources, informs people about energy conservation, forest management, and home-buying. This program also deals with municipal information needs about matters relating to community planning, environmental management, and economic development. For example, it encourages community beautification by providing landscaping information and assistance on visual resources management.

The County Extension Service, as conveyed in its annual report, has formulated objectives covering the four program areas and has developed methods for meeting each one. For example, an objective of the Commercial Fruit Production program, which is under the general agriculture program, is to "increase quality of fruit and yields through efficient fertilizing and pruning programs." (3). To meet this objective, Mr. James T. Williams, the regional fruit specialist, is engaged in such activities as field observation, conducting pruning clinics, meeting with the Masachusetts Fruitgrowers' Association, and using the mass media (circular letters, radio programs, and a telephone hotline).

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[3] Ibid., p. 20.

4-H/YOUTH DEVELOPMENT CLUBS

Through this program, youth can take advantage of numerous learning opportunities. Since many of the 1.37 million people residing in the county live in an urban/suburban environment, the youth often do not have farm animals at home; they are more attracted to veterinary science than to the type of programs traditionally associated with the 4-H program. People wanting to share their skills do so on a voluntary basis. For example, someone operating a greenhouse could organize kid into a learning unit. Since both the youth and the volunteer teachers are interested in learning, they are receptive to the various materials distributed through the Extension Service.

The County Service can draw upon resources prepared by a network consisting of other counties in the state, the State University, other states, the Northeast Cooperative Extension, Rutgers University (a clearinghouse for a pool of 4-H literature, including resource guides, developed nationwide), and the U.S. Department of Agriculture. The Extension Service also encourages the private sector to contribute to the learning of the youth. For example, the J.C. Penney Consumer Education Services, New York, develops and makes available appropriate resources. Further, the National 4-H Council is an information guidance center for youth at the national level. It devises leaflets that convey current information in a usable form. Sometimes the materials offer financial incentives for the completion of a task.

The 4-H program relates to libraries in two ways. First, libraries can house 4-H project materials on closed reserve. In this way, they provide the community with access to current, readable information on such topics as photography, interior design, commodity marketing, and raising dairy goats (their breeding, milking, show, and role as pets). Second, short term projects such as "mulligan stew" (films and workbook activity for the teaching of nutrition) can be presented in libraries and library staff members can participate as volunteer teachers. For another project (one lasting six weeks), an incubator might be set up in a school or library so that children can watch the birth of chickens.

ACTIVITIES

Since the population is not concentrated in the Concord area, there are few walk-in questions. People prefer to telephone; much of the staff's time, therefore, is spent counseling clientele by telephone. For fiscal year 1981, there were 25,047 telephone inquiries or a daily average of 95 calls. The home economists, alone, answered reference questions on nutrition, food safety and preservation, food preparation and storage, stain removal, clothing care, selection of home furnishings, money management, energy and home management, and consumer problems.

Staff members handle "a minimum of 40,000 informational and program contacts per year from citizens of Middlesex County." (4) A monthly Extension Home Economics Newsletter announces home economics courses, a calendar of events, and consumer information; postage for this free newsletter is paid by the U.S. Department of Agriculture. In addition, the Service houses a reference library of booklets and information sheets available from the U.S. Department of Agriculture and the Cooperative Extension Service, University of Massachusetts. Many individual publications are also available free to county residents. (5) The Cooperative Extension Service, University of Massachusetts, prepares and distributes information sheets and booklets that provide capsulized information in a readable manner and that are available free.

Staff members are specialists within broad areas. Home economists, for example, might specialize in family money management, housing, credit, and consumer rights. As specialists, they must keep abreast of new developments in the field. In this regard, they receive in-service training from the University, participate in professional associations, and may even take graduate courses. At present, the staff consists of twenty-four persons, fourteen of whom are extension agents and the rest comprise support staff.

BUDGET

For fiscal year 1981, the total budget of the County Extension Service was $389,000; the cost of the Service to taxpayers was $0.27 per capita. It might be further noted that "during the past fiscal squeeze (4% cap), the Extension Service in Middlesex County has maintained normal operations in most areas, and in some other areas have actually expanded

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[4] *Ibid.*, p. 5.

[5] See "Home Economics Publications List" (Concord, MA: Middlesex County Extension Service) and "1981 Home and Garden Publication List" (Concord, MA: Middlesex County Extension Service).

services." (6) However,

> "In a time period where government expenditures are under a terrific demand by the people to justify their worth, those public service organizations such as the Middlesex County Extension Service must try to present a clearer picture to allow the individuals making decisions on budgets to realize the value of the dollars spent both in direct services rendered and volunteer groups assisted and led by our staff." (7)

Financial support and recognition of the value of the Extension Service varies from state to state. The Service in Massachusetts is not as well supported as those in states such as New York. To a large degree, Massachusetts is an urbanizd state, with decreasing interest in agriculture. Further, the size of the county and the population served is much higher in Massachusetts than in New York.

Staff members in Massachusetts are part of county government and most of their salary depends upon city and town assessments. Yet, more people identify with municipal or state government than with county government. In fact, there is a bill currently before the state legislature to abolish county government. If the bill passes, the Service, if it is to survive, might have to be affiliated with the State University. In states such as Minnesota, staff members are classified as university employees operating in the field. As can be imagined, the county versus state organization, as well as the size of the county served and budget allocations, impact the initiation and carrying out of programs.

Some 95 percent of the funding comes from county government. The remaining percentage comes from the University, which dispenses Federal monies; no State funding is involved. The allotment from the county budget for the next fiscal year may sharply decline. In fact, the number of staff members may be sharply reduced; needless to say, staff morale is low. Travel allowances have also sharply declined. Further, outside funding is not seen as a viable option at present. The County Service may receive monies to initiate a project but may find it difficult to attract funds to keep the project on-going. As one staff member explained, "we are operating an information service as if it were the 1920s. We have to rely on word-of-mouth, makeshift programs, and hastily produced newsletters." The telephone service is in place but it only benefits those people willing to pay for the call. Budget constraints limit the use of conference calls and the ability to provide individualized service. Farmers, for example, want an agricultural specialist to visit them and to offer personalized services. Budget

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[6] *Annual Report*, p. 4.

[7] *Ibid.*, p. 8.

constraints make this increasingly difficult to do. One staff member mentioned that "there is no end of the services than I could think of, if there were only the money." A teletype service connected to computer information banks would provide useful information, which could be digested and made available for the public. However, such a service at present is not feasible.

If any new services become available, they must provide accurate, up-to-date information in a readable manner. With staff cuts and the present budgetary situation, the County office may not be able to maintain its present level of services. It may have to start charging for services previously provided free and to concentrate on the most financially viable programs.

DEFINITION OF CONSUMER INFORMATION

Instead of operating with a broad definition of consumer information, the County Extension Service looks at the term in relationship to various target audiences, e.g., the provision of information (print or word-of-mouth) to fruit growers. The definition therefore, is viewed in the context of the four program areas (home economics, agriculture, 4-H/youth development, and community resource development) and the specific activities within each. Of the four program areas, the one for agriculture has the most easily identifiable audience.

In meeting program objectives, staff members can draw upon the Extension Service network; they can approach other counties, the land grant institution, as well as other agencies and organizations with whom they have informal contacts. For example, questions requiring the mediation of consumer complaints might be referred to the Boston Consumer Council.

It might be noted that staff members do not monitor user satisfaction with referral. They suspect that users are satisfied since a number of them will return with other questions. There is a problem, however, in relation to the budget. The agriculture program is dependent upon personal contacts with farmers and direct observation of the particular problem. Curtailment of travel expenditures reduces direct contact with the target group and increases farmer disillusionment with the Service as well as their willingness to seek another information provider, one offering a high level of interpersonal contact. The problem, therefore, is one of maintaining communication with the target audience. According to one person interviewed,

> the farmers know that it is difficult for us to travel; however, they want us to examine the problem and not to guess. My clientele is becoming disillusioned and are not as supportive today as they were in the past. This is obvious from a recent experience, where for a lobbying effort, we could not get a written statement of support from the Massachusetts Fruitgrowers'

Association; rather, our support came on an individual basis.

POLICY

Top priorities of the Extension Service relate to information acquisition, organization, dissemination, referral, and interpretation/advice; as well as the delivery of information, problem-solving, and consumer education. Staff members take the research results derived from the agricultural experiment stations and interpret them in language understandable to laypersons. They make sure that the information provided is up-to-date. Lobbying, in the past, has been a low priority. From now on, it must be "high pitch" (ranked a three). Advocacy, however, was given the lowest priority - a four on the five point scale.

When asked to rank the five factors in terms of importance, those staff members interviewed accorded top priority to understandability, accuracy, and up-to-dateness. Up-to-dateness and accuracy were seen as going hand in hand. Cost in terms of money and time were low priority. The County Extension Service does not charge for 75-80 percent of its services. Only such services as soil and tissue testing necessitate a charge. Staff members want to provide the most cost/effective services so that people will want to return.

USER SATISFACTION

The effectiveness of programs has been largely determined through questionnaires, counting the number of people participating in a program, determining if clients adhere to specific recommendations, and follow-up at meetings to see what people want. According to one staff member, "everybody is now paying attention to dollars. Proposition 2-1/2 has turned things around, and people want to see the value." Evaluation must take into account economic impact: by placing a monetary value on a service, "we can demonstrate our contribution." However, if several information providers contribute to a successful outcome, it can be hard to compute the contribution of each one. Monetary determination aids the state extension service in communicating with Washington and provides "a more dramatic indicator than simply saying that everybody likes what we do." The problem with a monetary measurement is how to "justify the need for a horticulturalist at a time when the police are getting laid off. Still, we can show that a horticulturist is needed."

ROLE OF LIBRARIES

When asked about the role of libraries in providing consumer information, the responses varied from serving as a meeting place and repository to being an active partner in the distribution of information. On the one hand, libraries were viewed as places where meetings and lectures could be held, and information distributed to the public. Libraries could also "obtain the publications we distribute as well as the index we prepared". On the other hand, librarians might be dacabase managers, searching databases (e.g,, those in agriculture) and supplying the Extension Service with publications that could be digested and made available to the community. To materialize, this role requires funding to support database searching and the duplication of research reports, those that have not been copyrighted.

It was suggested that the role of libraries in the area of consumer information services should be one of information acquisition, organization, and dissemination as well as document delivery (all accorded a one). Consumer education rated a two; libraries provide a meeting place for Extension programs. Information referral rated a three on the scale of one to five; referral, however, was perceived as occuring from libraries to the Extension Services and not visa-versa. None of the other categories specified in the question (information interpretation/advice, advocacy, lobbying, and problem-solving) were seen as important; all rated a five.

CONCLUSION

The Cooperative Extension Service unites the U.S. Department of Agriculture with the land grant university in every State and representatives from each county across the nation. In this way, research and other information filters down to the general public; individuals; therefore, become more sophisticated consumers. Through newsletters, a telephone service, workshops and speeches, county officials take and digest information obtained from the U.S. Department of Agriculture and the University, regulations, as well as source material gathered from other government agencies and informal contacts. The information is synthesized and made available in a usable form. Pamphlets produced by the Federal Government, for example, might discuss issues in general terms and not take into account local variations. County officials must alert their clientele to these variations.

The University develops plans of work and directs the overall orientation of the extension service in each state. The county sets its priorities within the state plan and prepares written program objectives and determines the best means for accomplishing these objectives. A danger in meeting consumer informtion needs is that staff members may try to accomplish too much. Since they cannot have expertise in all areas, they must decide what they want to accomplish and what to refer. Staff members are aware of program goals (rated a one) because they set objectives and develop the means by which to meet them. Further, they must specify the amount of time they plan to spend on each activity for the fiscal year and a given month. End user awareness of the goals vary from program to program, the method selected for program implementation, and the amount of the budget allocated. Since awareness also depends upon the extent to which staff members can work with the target groups and community leaders, the extent of end user awareness was rated a three. In reponse to the question about the extent to which goals are being achieved, the rating was a three; budget curtailments affect the rating and the ability of staff members to work with people on an individual basis. Budget curtailments make them also more passive in the implementation of some programs. Staff members are less likely to reach out in an active manner; they are more likely to wait for people to approach them. Budget limitations greatly affect the ability of the County service to develop plans to meet the goals (rated a four).